TOWER HOBBIES

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1978-1979 R/C CATALOG $1.50



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★ **MANUFACTURER'S DIRECTORY**
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★ **INDEXING**
Both a manufacturer and a product index to help you find exactly what you're looking for as quickly as possible. Pages 3, 4, and 5.

★ **ACCESSORY COMPLETION GUIDE**
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★ **PRICE LISTINGS**
Same old easy to use Price Listing Section (page 268) where you find everything together in one place (also shows page number of where the item appears) . . . PLUS . . . all prices and stock numbers are now on the page where the merchandise appears in the catalog.

★ **SECTION INTRODUCTIONS**
Each section of the catalog has an introduction written by Bill Baxter. Hopefully these introductions will answer some of your questions, provide you with helpful hints and suggestions, or just entertain you.

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TOWER HOBBIES GENERAL INFORMATION

A WORD TO OUR CUSTOMERS

All of us at TOWER HOBBIES extend our sincerest thanks to you, our customer and friend, for making Tower Hobbies your hobby shop.

Your satisfaction is the reason we maintain an extensive inventory. Your satisfaction is the reason we offer the fastest service at our unbelievably low prices. Your satisfaction is the reason we give so much personal attention to each and every order. YOU are the reason why Tower Hobbies exists.

Now, as in previous years, our overriding policy is total customer satisfaction. You have come to depend upon this in the past, and you can rely upon it in the future.

ABOUT TOWER HOBBIES

Tower Hobbies is the largest, finest, fastest, friendliest, and the most progressive R/C Model Airplane Mail Order Company in the United States. Tower Hobbies is NOT a little hobby shop that sells mail order as a sideline, but rather we are a highly specialized and efficient volume merchandiser. Our large quantity purchasing enables us to buy at the lowest price and the large number of orders we process each day enables us to use the most efficient methods—all of which add up to fantastic savings and excellent service to our more than 35,000 customers.

Tower Hobbies is NUMBER ONE because we know that you are the most important part of our business. That's something we never have, nor ever will forget. Can you think of any reason why you should settle for less?

TOWER HOBBIES FIRSTS

Tower Hobbies has led the way in the past few years in innovative ideas, customer convenience services, and inflation fighting pricing policies.

We were the first to install TOLL FREE phones for your convenience. We were the first to keep track of inventory, remember backorders, and process invoices with an IBM COMPUTER which enables us to keep our errors to a minimum. We were the first to publish a FULLY ILLUSTRATED CATALOG at a reasonable price (free to past customers). We were the first to publish a magazine like TOWER TALK. We were the first to REALLY DISCOUNT all items in R/C, and to back that discounting up with an extremely well-stocked inventory.

And we're just getting started! While our competitors are busy catching up we will continually be adding new firsts to our list. We welcome you to our rapidly growing family of satisfied customers—join the leader who makes the firsts happen!

TOWER HOBBIES GUARANTEE

If for any reason you do not like or want something you received from Tower Hobbies, you may return the merchandise within 10 days for a full refund or exchange.

The returned merchandise must be unused and in original condition and must be accompanied by the original Tower Hobbies invoice. Returns will be accepted ONLY if returned by UPS or insured Parcel Post. All returns must be postage prepaid. Refund or exchange is limited to the amount paid for the merchandise returned only and will not include postage, handling, and insurance fees paid for original shipping or returning.

If the item you want to return has been used in any way, is not in its original packaging, or if it is beyond the 10 day return period, then you must call or write for return authorization before sending it back. Without this authorization we will not accept your return.

SUPER SPECIALS OF THE MONTH

Every month in our magazine ads we run several items on super special. Discounts of up to 50% are not at all unusual. It's just one more way Tower Hobbies helps to stretch your hobby dollars. Don't miss these sales, as they represent aboslutely the finest values in R/C.

SUPER SPECIAL HOT SHEETS

Periodically we send out super special hot sheets with orders or through the mail. These are super specials at fantastic savings. Intended as a bonus for our current customers only, these specials never appear in magazine ads or other forms of advertising.

Occasionally we will be overstocked on an item, or sometimes we just pick up a few of an item at a super price. When this happens, we pass the savings on to our good customers—customers like you!

When you get these hot sheets—act fast! Quantities available at the special price are usually limited to on-hand inventory and no backorders are usually taken.

ABOUT THIS CATALOG

We sincerely believe that this catalog that you have in your hands is the finest and most complete illustrated R/C Model Airplane Catalog ever produced. Within these 294 pages you will find over 2,800 items from more than 139 outstanding manufacturers. It took us over four months to compile this catalog and we feel that just about anything you could ever need in R/C is contained in it.

Plan on spending many hours in your favorite chair reading through this catalog. Packed into each page is all of the excitement and information that's found at a full scale trade show, everything except the noise and stuffiness of the crowds.

Keep your catalog handy for all of your modelling needs; it's your passport to the finest and most extensive collection of R/C Model Airplane supplies in the world!

TOWER STOCK NUMBERS

Every item that we carry has a Tower Stock Number. Please use these stock numbers when ordering to prevent any mistakes. THIS IS VERY IMPORTANT!!! Every item we carry is listed in the Price Listing Section (Pages 268-283) along with its stock number and its retail and Tower price. More complete instructions are found on Pages 268 and 284.

PRICE AND/OR DESCRIPTION CHANGES

All prices, pictures, and descriptions in this catalog are subject to change without notice.

NEW PRODUCTS JUST RELEASED

As you all know, new products are coming out all the time. When these new products do become available, you can be sure that Tower will carry them. Just give us a TOLL FREE call for information, prices and stock numbers.

HOW TO ORDER BY MAIL

Whenever possible, please use a Tower Hobbies order form. Two order forms are provided on Pages 285 and 287 of this catalog. You will receive additional order forms with your order.

To insure that your order will be filled exactly as you desire, please make sure you follow the order instructions on Page 284.

HOW TO ORDER BY PHONE

Ordering by phone is the fastest, simplest, and most sure-fire way to get your order on the way to you. Simply call us TOLL FREE and one of our extremely helpful and knowledgeable sales people will be happy to take your order. Please have your Tower Stock Numbers and your Tower customer number handy whenever you call us. When you order by phone you will get instant feedback as to what's available and what is not.

Our phones are open from 9:00 AM to 5:00 PM weekdays, 6:00 PM to 9:00 PM Monday through Thursday evenings, and 10:00 AM to 5:00 PM on Saturdays. We are closed Friday evenings and all day Sunday.

HOW YOUR ORDER WILL BE DELIVERED

Your order will be shipped by UPS (United Parcel Service) whenever possible. Shipments to APO's, FPO's, Foreign Countries, states not served by UPS, and P.O. Boxes not served by UPS will be shipped by Parcel Post. If you have a street address in addition to a P.O. Box address, please list it so that we can ship by UPS. There is a flat $2.00 postage, handling and insurance charge for any order shipped by UPS or domestic Parcel Post. If your order is shipped COD, there is an additional $2.00 charge.

If we are unable to ship your order by UPS or regular Parcel Post because of size (some large kits) or content, your order will be sent by truck, or some other means and will be shipped freight collect. Before we do so, we will always notify you and gain your approval.

For all foreign orders, please include an additional $10.00 or 20% of the merchandise value, whichever is greater. All excess postage received will be refunded with your order on these special shipments.

YOUR TOWER HOBBIES INVOICE

SAVE your Tower Hobbies invoice! If you should ever want to return anything, you must send the original invoice with the merchandise. Also, your invoice is your bill of sale in the event you should ever need to substantiate purchase date for warranty purposes. Also, please note your customer number in the upper left corner—please use it when ordering. It makes order processing much faster.

TOWER HOBBIES OPERATING POLICY

MORE ABOUT RETURNS
REGULAR RETURNS

If your merchandise is new and unused, and in its original condition and packaging, we will be happy to take it back if you are not happy with it. Please send back your original Tower invoice with your returned merchandise and make sure that it is being returned within 10 days of its purchase. If you have had the merchandise longer, you must call us for return authorization or else your return will not be accepted. Please wrap all return merchandise very carefully so that it does not become damaged in shipment. Please also see that it is shipped back to us with the same type of packaging as it was received. For example, if the box was wrapped in brown paper, then wrap your return in paper also. Please avoid any writing on a kit box as this may prevent the merchandise from being accepted for return. All return merchandise must be accompanied by your note of explanation telling us what you would like us to do. If you would like an exchange and are enclosing another order, either send the payment to cover the substitute order or request that it be sent COD for the balance. DO NOT send a return back COD as it will not be accepted. We reimburse for return postage if there has been an error on our part, or in any case justified. Send all return merchandise to:

TOWER HOBBIES INC.
1604 N. Lincoln Ave. Urbana, Illinois 61801
RETURNS WILL NOT BE ACCEPTED AT OUR P.O. BOX ADDRESS.

DEFECTIVE RETURNS

If you have received defective merchandise, and you have already tried to use it in any way, DO NOT SEND THE MERCHANDISE BACK TO US. The manufacturer is responsible for any defects of the material, and they will handle these problems for you. We cannot take back any merchandise that has been used, and if you send it to us, we will have to send it on to the manufacturer, or return it to you and this just results in a delay to you.

DAMAGES

If a shipment comes to you and you realize that it is damaged before you accept delivery, please refuse it. If you have already accepted delivery on a shipment, and then find shipping damage, please call Tower Hobbies immediately. If the order was shipped United Parcel Service, we will issue a "Call Tag" on the merchandise. This means that UPS will come to your address to pick up the merchandise and you will avoid the cost of paying the return postage. If you try to send back a damaged item yourself, you will jeoparadize our method of placing claims with United Parcel Service, and you may not receive credit for the return. If the item was shipped Parcel Post, please also call us immediately and we will contact the Post Office and they will contact you.

CUSTOMER NUMBER

Your customer number is very important, and can help us offer you the fastest most efficient service. You will receive a customer number when you place your first order with Tower. It appears in the upper left hand corner of your Tower invoice. Please have your customer number handy when you place a phone COD order, or whenever you call Tower Hobbies for any reason, and put it on your order form when you place a mail order. This helps us, especially if you have any question about a shipment. Please order under the same name on all your orders to avoid confusion.

CHECK CLEARING

If you send us a large personal check to cover an order, especially a first order, there may be a delay as the check will be held for clearance. We allow 20 banking days for a check to clear, and if your check is held, it will be shipped after the allotted time has elapsed. If you place a large order, and want to insure that the order will be shipped as quickly as possible, please send a money order or certified check. We do not check references as we are not equipped to do this, and the only way you can build up your own credit rating with Tower Hobbies is simply by ordering from us. The personal check limit is gradually raised, and the more orders that are placed, the larger the personal check that will be accepted. Most orders are shipped without any delay at all.

NO CREDIT CARDS

At this time, we do not handle any credit cards. All orders are shipped either prepaid or COD. Due to the costs involved, we would have to raise our prices if we accepted credit cards, and since we want to keep our prices as low as possible, we are not now handling credit cards. If you send in an order requesting a charge to your credit card, it will simply be returned because we have no way of handling it.

OPEN ACCOUNTS

We do not handle any open account shipments. All orders must be prepaid or sent COD. If you are ordering through a company, and choose to send a company check to cover the shipment, the company check will be treated as a regular personal check and may be held for clearance if it is a large check.

COLLECT PHONE CALLS

WE DO NOT ACCEPT COLLECT PHONE CALLS. You may call us either on our WATS lines or our regular phone lines. Our TOLL FREE LINE No. is 800-637-7686 (800-252-3336 for Illinois only), and our regular phone line is 217-384-1010. If it is difficult to reach us, please just keep trying. Our lines are quite busy, but we have a large phone staff and do our best to handle all the calls. We will not, under any circumstances accept collect calls.

SPECIAL POSTAGE

We normally ship orders either by United Parcel Service or through the Post Office for our regular handling charge of $2.00 per order. However, if you want an order shipped either by Blue Label service or Airmail, we can handle this for you also, but there are additional charges. We can presently ship Blue Label (UPS Air service) to the following states: California, Washington, Oregon, Florida, and parts of Alaska and Hawaii. In Alaska the area receiving Blue Label service is mostly around Anchorage. The rest of the state can only be shipped by parcel post. In Alaska and Hawaii when we ship UPS, the only way UPS can be shipped is Blue Label. There is no regular (or brown label) UPS to Alaska and Hawaii as all UPS shipments must go by Air. If you would like an order shipped Blue Label, the charges are as follows: WA, CA, OR and FL $2.25 plus $.50 per pound (the $2.25 replaces our regular charge of $2.00-then add the charge per pound). If you place a phone order to be shipped by Blue Label, our phone people will not be able to give you the exact charges as the order will first have to be weighed. Hawaii and Alaska-$2.50 plus $.50 per pound. We also figure the Airmail costs by weight.

For APO and FPO addresses, we can ship: SAM at no additional cost and PAL for $3.00 (our normal charge of $2.00 plus $1.00). Not all orders can be shipped by SAM or PAL as there are size restrictions. To be shipped either SAM or PAL, the package must be a maximum of 60" in length plus girth combined, and weigh less than 30 pounds.

EXTRA LARGE KITS-We carry some kits that cannot be shipped by parcel post at all due to the size restrictions. They can be shipped by UPS and therefore must be shipped within the country. The kits too large to be shipped by parcel post are; Airborne Associates kits, all Bridi fiberglas kits, Dumas Competition DV 60 fiberglas, Kavan Bell Jet Ranger, MRC Cessna RTF and Cherokee RTF, and all Skyglass kits.

FOREIGN ORDERS

Please include sufficient postage to cover the cost of the merchandise being shipped to you. A minimum of $10.00 should be included and we will refund any excess. We charge foreign postage strictly by weight, and you will be charged our shipping costs plus handling. Please specify whether you want an order shipped by Airmail or surface mail and we will figure the charges accordingly. We have an international kit list available which lists all the kits which can be shipped internationally, and their weights. If a kit is not listed, it is too large and cannot be shipped out of the country. Foreign customers please send a self-addressed stamped large size envelope if you wish to get a copy of this list.

PROBLEMS

If you have a problem with an order, we will be happy to help you. However, our phone sales people take orders only and do not have access to the files and cannot answer questions about an order. You can give them your question and then call back the following day for the answer.

BACKORDERS

We try to backorder every out of stock item that we can if you request that an item be backordered. Certain special items are not backorderable, and small accessory items cannot be backordered. Due to the costs involved in processing backorders, we are unable to backorder anything under $5.00 unless you are ordering a large quantity of the same item.

REFUSED COD'S

We are happy to ship to our customers COD, but please be sure that someone is available to accept the delivery. If delivery is refused, we will not be able to ship COD in the future.

TOWER

TOWER HOBBIES is the largest and most progressive R/C mail order company in the United States. Many things including our extensive inventory, our sudden service, our unbelievably low prices, our Toll Free phone lines, and our personal attention to each and every order are the reasons why.

These exclusive qualities of TOWER HOBBIES are the result of the efforts of the people pictured on these two pages. These sincerely interested people ARE TOWER HOBBIES.



Kim Ahlstrand — Office



Bill Baxter — Sales Mgr.



Linda Bebar — Shipping



Janice Bleichner — Office



Sherry Campbell — Advertising



Mary Combs — Shipping



Nancy Dorsey — Phones/Office



Alan Green — Purchasing



Lynette Hanley — Computer/Office



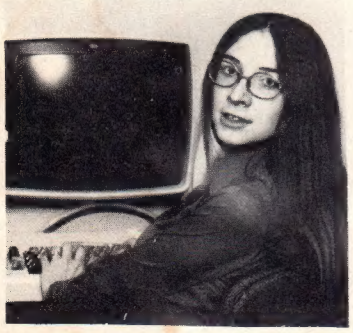
Connie Hatter — Office



Bruce Holecek — President



Jeri Holecek — Office Manager



Karen Jerabek — Computer/Office



Cheryl Koester — Computer/Office



Ann LeTarte — Phones/Office



Kirk McKenna — Shipping

HOBBIES

All of us at TOWER HOBBIES are determined to do something for you. And that's to provide the finest, friendliest and fastest service in the R/C business. We want to answer your questions, provide information, and of course take your orders for your modelling supplies. And we want to do it in the most convenient way possible for you. That's why we have a TOLL FREE phone number.

We want you to feel free to call us with your questions, problems, and orders. After all, you're the most important part of our business, and we promise to always treat you that way. Why should you settle for less?



Jeannette Marchand — Office



Shirley Montague - Warehouse Mgr



Rick Nosek — Data Processing Mgr



Joe Oschwald — Accountant



Dianna Pagel — Shipping



Debbie Rexroad — Shipping



Janis Sand — Phones



Dody Schlesinger — Office



Cindy Smallwood — Shipping



Donna Spracklen — Phones/Office



Kathy Tull — Shipping



Bruce at 1978 Toledo Show



Bill at 1978 Toledo Show



Al at 1978 Toledo Show



Al, Bill, and Bruce — "Team Tower" at 1978 Toledo Show

POWER KITS

The vast majority of available R/C planes are powered. These aircraft are the ones with which we are most familiar, from the ones that buzz about the sky like gnats, to ones that simply drone along in circles. As we gain some knowledge, either by going to the field, by reading magazines, books, or even perusing this catalog, we find out that not only do the planes differ in lines, but each type is designed for a specific purpose.

Depending on your needs, desires, and experience, choice of a particular aircraft can be critical. A raw novice has no business choosing a complex scale replica of a World War II bomber, or a high performance racer; but, by the same token, the "old pro" may not find enough challenge in lazing a slow trainer around the pattern.

For your convenience, we have compiled a list of the aircraft kits we carry, and have broken it down into various categories so that you can refer to this list to help you choose your next plane.

Trainers: In any hobby one must start somewhere. Trainers provide the novice with a good starting point (there is no end!) upon which to base their new hobby. Design characteristics include rugged construction, roomy fuselage compartments, large high wing, and gentle handling. These features give the novice the best possible chance to learn to fly with as little "re-kitting" as possible.

When you choose a trainer, we believe that you should get the largest plane your budget allows. Our reasoning is that a larger plane is less affected by the wind, and is much easier to see when it gets up in the sky. However, if your budget isn't able to take a large plane, do not resitate to get a smaller one. They are all pretty good, so you will not go wrong choosing any of the planes we handle.

(Note: In each listing of the kits in each section, we have used our manufacturer's 3-letter code. Refer to the first page of the Price Listing Section for the full names of each manufacturer).

Up to .049: ACE Whizard; AIR Q-Tee; COX Cessna Centurion; GBG Ranger 42, Jr. Falcon, Jr. Skylane; MHH Quickie; MID Lil Tri-Squire; SOU Honker; STE Mini-Fledgling.
.09-.15: ACE Alpha; AFI Electra-fly, Bushmaster; AND S. Ray, H-Ray; BRI T-10; CON Airscout; GBG Ranger 42; MAR Bushwacker; MEN Trainer; MHH Small Wonder; MID Tri-squire, Cardinal ARF; STE Cessna 180, Mambo, PT-19; SUR Skylane 182, All-foam J-3; TOP Tauri, Headmaster; WIN Drone; Wor J-3.
.19-.29: AFI Bushmaster; AND S-Ray, H-Ray; BAU Hardwoody; BRI Basic Trainer, T-20; CON Airscout; GBG Falcon 56; MEN Trainer, J-3 Cub; MHH Miss Vintage; MID Tri-squire, Little Stick, Sweet Stick, Attacker; SIG Kadet; STE Piper Cruiser; SUR Balsa J-3, Champion, Skylane 182, All-foam J-3; TOP Tauri, Headmaster; WOR J-3.
.30-.40: AND H-Ray, Big H-Ray; BRI Trainer 40; CMP Geni Trainer; GBG Falcon 56; Skylane 62; JEN Ugly Stick; LAN Transit, Comet 35, Comet II; MEN J-3; MHH Miss Vintage; MID Sweet Stick, Strikemaster, Attacker; PRA Panther; SIG Kommander; STE Piper Cruiser, Fledgling, Citabria; TOP Tauri, Headmaster, Freshman Trainer; TOW M.A.N. Trainer 40; WIN Drone.
.45-.60: BRI Trainer 60; GBG Sr. Falcon; JEN Ugly Stick; LAN Comet II; PRA Panther.

Pattern Kits

Today's modern pattern ship is a sight to behold. They are sleek, fast aircraft that are designed to fly the maneuver pattern with smooth grace. The event is called "pattern" because every contestant flies the same set sequence of maneuvers, the same pattern . . . hence the name. These planes are definitely not for the novice builder or flier. The complexity of some of their systems, the necessity for absolute attention to the details of aligning the airframe, and the skills needed to fly the bird, preclude the novice from starting with these aircraft.

All of the planes that we have listed as "pattern" aircraft are called such by their manufacturers. Some of these are planes that once were of top level capabilities, while others are capable of all of the pattern maneuvers. They are:

Up to .049: ACE Mach-None, Pacer; SUR Baby Birdy.
.09-.15: AIR New Era III; STA Tom Kitty Mk. 15.
.19-.29: ACE Super Pacer; AIR New KEra III; AND Minimaster; BRI Sun Fli 4-20, Tweedy Bird; LAN Scamp; STE Rimfire; SRC Alley Cat.
.30-.40: AAS Phoenix VII (.40 size); AND Trainermaster; BRI Super Kaos 40, Dirty Birdy 40; LAN Scamp; SIG Kougar; AKY Phoenix V; SRC Bobcat, Mustang-X, Gater Flea; STA Tom Kitty Mk. 40; STE Lancer, Rimfire.
.45-.60: AAS Phoenix VII (60 size); AND Sportmaster; BRI Kaos, Super Kaos 60, Dirty Birdy 60, UFO; LAN Caprice, Jester II; MID Mach-I; SIG Komet; SKY Vertigo II, Phoenix VI; SMI Patricia; SRC Tigertail, Compensator, Atlas; TOP Taurus, Kwik-fli III.

Scale Aircraft

Scale aircraft are called such because they are scaled-down models of actual aircraft. The amount of detailing is left up to the individual builder. You can go from a plane that just looks like the real thing in a superficial way, to one that is detailed to the coffee stains on the pilot's tie! We offer a wide variety of scale ships so that you can have the largest choice in selecting your favorite bird. Remember, we can supply you with nearly everything you'll need to make your model the best one around (you'll have to supply the coffee stains!)

Up to .049: ACE Shrike Commander, GMC F4U Corsair, Zero; HOU all planes in ½A series; STE ½A Corsair.
.09-.15: AFI Fournier RF/4, P-68 Victor; ALL BD-6; CON Airscout; CRA Buhl Bull pup; HOU Pietenpol; MID Super Chipmunk; STA Buccaneer; STE Cessna 180, PT-19, ½A Corsair.
.19-.29: AFI P-68 Victor; ALL BD-6; CON Airscout; HOU Pietenpol; MEN J-3; ROY P-68 Victor; SIG Piper J-3, Clipped-wing Cub; STA B-24 Liberator, Buccaneer; STE Tri-Pacer, Cessna 180, PT-19, S.E.5a, Piper Cruiser; SUR Balsa J-3, Champion, Skylane.
.30-.40: BRI Compass Cope "R", Shrike Commander, F-7F Tiger Cat, CON Barnstormer, Super-Fli, Travelaire; HOU P-51 (29-40); JEM PT-19, P-51, ME-109, FW-190D-9, F4U Corsair; MEN J-3; ROY Cessna 182 Jr., Hein Jr., Zero Jr., Spitfire Jr., Piper Colt Jr., Bleriot XI, B-25, P-38, Cessna 310Q, Cessna Skymaster, Douglas C-47; SIG Super Chipmunk, Cessna 150, Smith Miniplane; STA Twin Comanche, P-39 Airacobra; STE S.E.5a, Citabria, Piper Cruiser, Stinson Reliant, Waco; VKK Corben.
.45-.60: EXH F-27; GAS ME-109; MID Pitts Special; PLA Spitfire, T-28B, FW-190, Waco; PRC Nieuport II; ROY Cessna 206, FW-190, Corsair, F-4J Phantom, Cessna 182, Spirit of St. Louis, Pitts Special, Hein Sr., Oscar, Zero, Spitfire, Piper Colt Jr., F8F Bearcat, S2 Pitts Special, Beech Staggerwing, P-51 Mustang, JU-87D Stuka; SIG Citabria, Ryan STA, Liberty Sport, Skybolt, SKY P-47, F8F Bearcat; SOR Skybolt, Spinks Acromaster; STA P-39 Airacobra, Comanche, Acrosport, Chipmunk, Aircoupe; STE Stearman PT-17, Fokker D-VII, Stinson Reliant, Waco; TOP S.E.5a, P-51 Mustang, P-40 Warhawk, P-39 Airacobra, P-47 Thunderbolt; VKK Fokker DR-1 Triplane, Nieuport 17, Sopwith Camel; WST B-17 Flying Fortress.

.60-Up: BRI P-51, Brown B-2, AT-6 Texan, Lockheed Sirius, Waco Meteor, Kraft Super-Fli, T-28, Spitfire, Minnow, Corben "Baby Ace"; NOS Aeronca Champ, Cessna 310, Citabria, J-3 Cub, Mr. Mulligan, Gere Sport, Jenny, P-51D.

Pylon Racers

Racing! Just the sound of that word makes the blood run! The image of powerful machines coursing around the circuit at peak performance makes anybody get a thrill just thinking about it.

Today's pylon racer is a specialized bird. Designed to tight restrictions, it offers the maximum excitement in the smallest package. You'll need a design that fits the rules, a special racing engine, lots of practice, and a love of head-to-head competition. It goes without saying that you'll have to be an expert flyer in order to fly one of these birds.

Formula I is the top of the line. They use the hottest .40 size engines, and can exceed 140 mile per hour. ½A racing was developed to allow one to race with a small budget, yet still give the competitor the maximum amount of racing. ¼midget was originated with the same idea in mind, but now is just a smaller version of Formula I . . . they use hot .15's. Club racing is for the person who would like to try racing, but doesn't want to invest in the trick equipment . . . those planes use standard .40's, and are of simple construction.

½A Pylon: ACE GLH-II, ALL ½A Streaker; SPI Quickie 200
¼ Midget: PRA ¼ Midget LIL Tony;
Formula I: PRA LIL Tony
Club Racers: Bri Quickest 500, 15-500; SPI Quickie 500

Biplanes

Nostalgia is upon us, and this has helped the biplane to come into its own in radio-control. The model biplane evokes the era of the open-cockpit, the smell of oil thrown from the engine, and the itinerant barnstormers who would drift from town to town in order to make their living. It's amazing, but every time someone brings out a biplane at the model field, people just have to look at it first. Perhaps it's the image of iron men flying wooden craft that makes us do it.

The model biplane is usually as well-behaved in flying characteristics as its one-wing brothers, but the shortness of its wing span allows it to have a much faster roll rate than other planes. Add to this the fact that they are usually short-coupled in tail length, and this adds up to a plane that can become highly maneuverable without much hesitation. Novices will find that the response of a biplane will be a bit quicker than they are used to. Biplanes, with very few exceptions, should be left until you become at ease with flying a medium to high performance low-wing aircraft, but once you master one of these planes, you'll just have to keep one in your airplane stable.

.09-.15: ACE All-Star Bipe; AIR Gere Sport; MHH Quickie Bipe; SOU Honker Bipe; STE Wizard.
.19-.29: SOU Honker Bipe; STE Wizard, S.E5a.
.30-.40: CON Barnstormer, Travelaire; SIG Smith Miniplane; STE.SE.5a, Waco.
.45-.60: AIR Acrostar; AND Aeromaster; PLA Waco; PRC Antic Bipe, Nieuport; ROY Pitts Special, Pitts S-2a, Staggerwing Beech; SIG Liberty Sport, Skybolt; SOR Skybolt; STA Akrosport; STE PT-17, Fokker D-VII, Waco; TOP S.E.5a; VKK Nieuport 17, Fokker DR-1 Triplane, Sopwith Camel;
.60-Up: NOS Gere Sport, Jenny.

Sport Planes

This group of planes is really a catch-all grouping. Actually, any R/C plane can be called a "sport plane", since the primary reason we are all in this crazy hobby is to enjoy ourselves. The name "Sport plane" means just as it says: A plane to sport around with. A sport plane is not designed to meet any criteria, but it can be. It may not be used in competition, but could be. We could go on and on. What we have done here is list the planes that do not really fit into any of the other categories, but are not plentiful enough to warrant a category for each different type of plane.

Up to .049: ACE Dick's Dream, Littlest Stick; MHM Joystick.
.09-.15: MHM Super Joystick; TOP Top Dawg.
.30-.40: PRC MINI-Antic; VKK Cherokee Babe; WIN Love Machine.
.45-.60: PRC Antic, Antic Bipe; VKK Cherokee.

Multi-engine

If you like lots of engines, we can offer a good selection of multi-engined planes, in a variety of sizes, although you'll find that most of them are for two .40 engines. You must have identical engines that have been run enough to guarantee perfect reliability. A lot of flying experience will also stand you in good stead.

A few things to remember: Multis (especially twins) need to have all of the fans turning, so if one engine dies, throttle back, and bring her down to land. Don't try to keep her flying level, as you can stall out the plane quite easily. Use rudder to keep the plane from turning into the dead engine . . . aileron will work, but you'll have difficulty during landing. While you have an engine out, do not make any abrupt throttle movements at all, as the asymmetrical thrust can give you terrific handling problems . . . especially if you jam the throttle forward — this causes the plane to react to the increased thrust immediately, and you may find the plane going into an uncontrolled spin. This can ruin your whole day!

Up to .049: ACE Shrike Commander, GBG Jr. Skylark.
.09-.15: AFI P-68 Victor; GBG Skylark 56.
.19-.29: AFI P-68 Victor; GBG Skylark 56.
.30-.40: BRI Shrike Commander; BRI F7-F Tigercat; Roy B-25, P-38, Cessna 310, Douglas C-47, Cessna Skymaster, P-68 Victor; STA B-24 Liberator, Piper Twin Comanche; WST B-17 Flying Fortress.
.45-.60: EXH F-27; NOS Cessna 310.

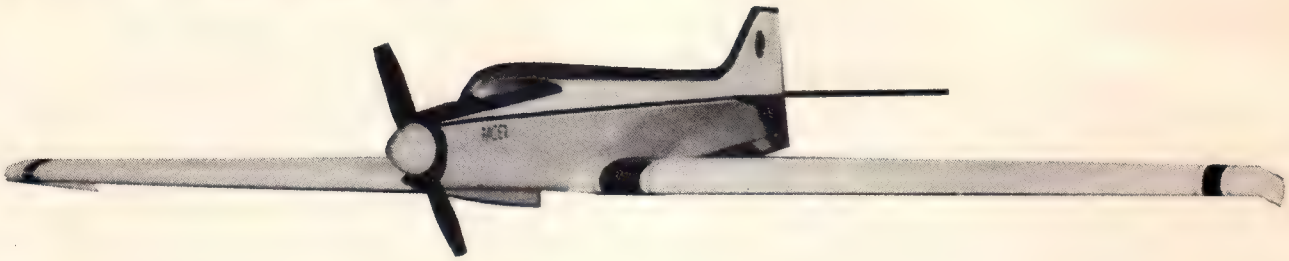
(Continued on page 88)

ACE

PACER

A UNIQUE 1/2A PATTERN SHIP

Designed by Owen Kampen



The Pacer is a high performance 1/2A powered plane designed to have the fast speed, solid tracking, smooth maneuvering, and axial roll characteristics of modern pattern ships in a small, compact, economical package based on a Cox Tee Dee .049 or .051 and a two-channel radio with miniature servos and a small battery pack.

This airplane offers more excitement and ability-to-perform than ever seen before in its size class. All of the advantages of small airplanes are maintained: it builds fast, it is economical on fuel, it transports easily, it can be flown in the smallest of fields with no need for a runway. With all of these advantages, it still has the outstanding performance to challenge the best of fliers.

All parts are band sawed and precision sanded with foam wing.

Span–40"
Length–30"
Weight–Approx. 22 oz. all up
Engine–Cox Tee Dee .049 or .051
Functions–Ailerons/elevator or coupled ailerons-rudder/elevator

Pacer Kit

MACH-NONE



With immediate, worldwide acceptance, the Ace Pacer revolutionized small plane concepts by opening a whole new category of R/C model aircraft: the high performance 1/2A pattern ship.

Now Ace R/C proudly announces the second kit in this exciting new category of R/C planes, the Mach None. It has the same outstanding features as the Pacer: it's fast building and economical on fuel, is easily transportable, and needs a minimum of flying field area. Yet, its performance needs to be experienced to be believed.

Has fully formed parts with molded canopy and foam wing. Is for at least two channel radios with small servos. Not for beginners.

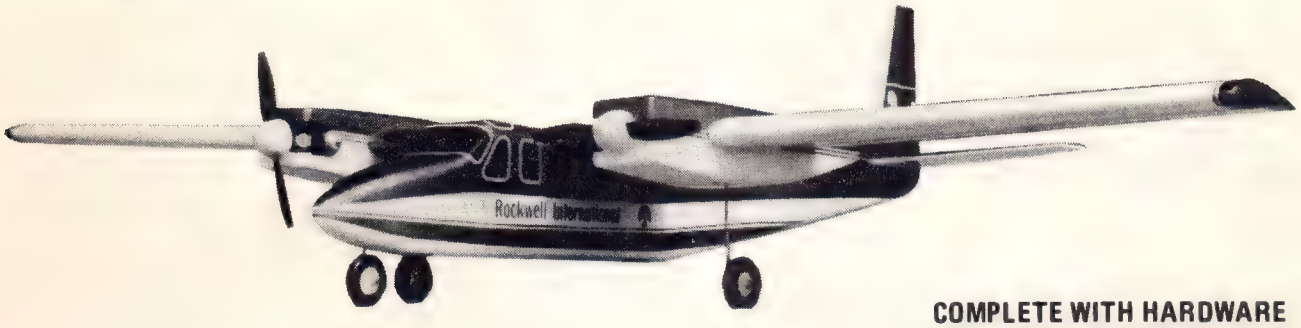
Mach None Kit

ACE

Aerocommander SHRIKE

designed by KEN HOLDEN

TWIN ENGINED MULTI ON A SINGLE CHANNEL BUDGET!



COMPLETE WITH HARDWARE INCLUDING MOTOR MOUNTS!

Foam wing/balsa construction—throttles not necessary because of good single engine characteristics. NOT A BEGINNERS AIRPLANE.

SPAN:	48"
AREA:	290 sq. in.
WEIGHT:	Approx. 32 oz. all up
FUNCTIONS:	3 CHANNELS
ENGINES:	TWO TEEDEE .049/.051's

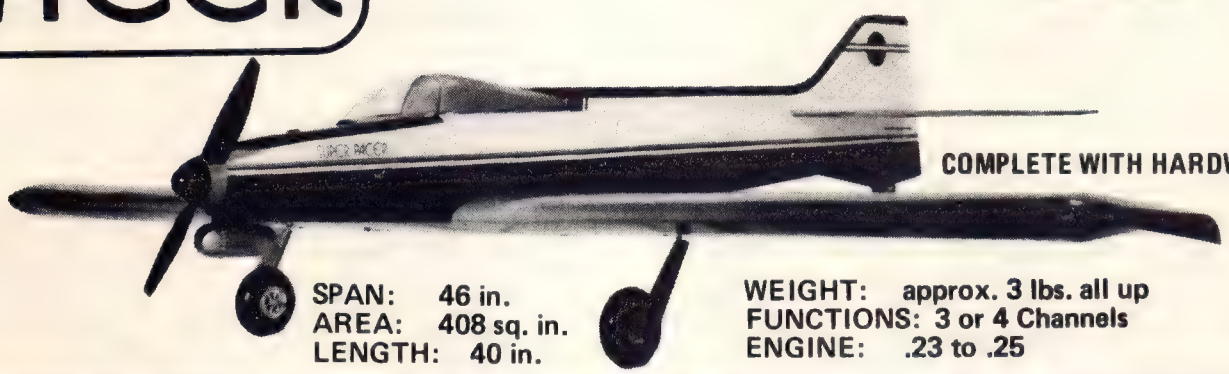
Aerocommander SHRIKE

SUPER PACER

A .23 POWERED PATTERN SHIP FOR SPORT AND COMPETITION

DESIGNED BY OWEN KAMPEN

Super Pacer



COMPLETE WITH HARDWARE

SPAN: 46 in.
AREA: 408 sq. in.
LENGTH: 40 in.

WEIGHT: approx. 3 lbs. all up
FUNCTIONS: 3 or 4 Channels
ENGINE: .23 to .25

FIRST CAME THE PACER--it started a whole new revolutionary category of model planes, the 1/2A pattern ship. Then people wanted a larger, fully competitive version with the same features--good looks, easy construction, sensible design, light weight, fuel economy, and solid performance at an affordable price. Here it is, the Super Pacer. For the economically minded pattern ship flier.

All balsa and ply construction. Quick to build, light and sturdy to last long. It has to be a sin to get so much enjoyment out of the performance obtained at so little expense.

ACE

dick's dream

IDEAL FOR THE BEGINNER

Designed by Owen Kampen



SPAN: 32 in.
AREA: 186 sq. in.
LENGTH: 25 in.
WEIGHT: 12-14 oz. all up
POWER: Pee Wee or Tee Dee .020
FUNCTION: Rudder-Only

The Dick's Dream is the standard for rudder-only trainers. Many, many people have made the Dick's Dream with Pee Wee .020 and the Pulse Commander Baby Twin their first successful R/C airplane.

Construction of the die cut parts and the foam wing is very easy and the step-by-step instructions are written especially for the beginner. Complete radio installation details are included.

With a Tee Dee .020 and a Baby Twin, a properly trimmed Dick's Dream is able to rudder-only aerobatics with the best of 'em.

Can also be easily adapted to a sport free flight.

Dick's Dream Kit

Whizard

Designed by Owen Kampen

THE PERFECT SPORT AIRPLANE



SPECIFICATIONS
Span–40½ in.
Area–240 sq. in.
Length–30 in.
Power–.049 to .051.
Functions–Rudder-Only; Rudder-Elevator; Rudder-Elevator-Throttle.

Whizard Kit

An ideal sport airplane for .049-.051 engines and single, two, or three channels. Features sturdy crutch fuselage construction, foam wing, band sawed parts, formed landing gear, and photo illustrated instructions.

Because the financial and emotional investment is low in the Whizard, you will find yourself doing more gutsy things flying this airplane and enjoying it more than ever before. Fun is the major characteristic of the Whizard.

An often overlooked attribute of the Whizard is how well it performs as a Rudder-Only trainer. With an Ace Stomper System, Golden Bee .049, and a 6 x 4 prop it is a docile, stable, easy-to-fly and build plane perfect for the beginner.

UPSTART II

Designed by Owen Kampen

IMPROVED!



SPAN: 32 in.
AREA: 200 sq. in.
LENGTH: 28 1/2 in.
POWER: Tee Dee .049
FUNCTIONS: Ailerons - Elevator

Although initially conceived and developed a few years ago, the concept of 1/2A racing is mushrooming because of the increasing fuel costs and the ever increasing need for expert skills in the quarter midget class. This new improved version of the popular Upstart is a step further toward perfection in 1/2A racing.

Through the data learned in the development of the Whizard and the Pacer, the Upstart II is set up for aileron and elevator control for tighter, groovier pylon turns and more consistent straight out flight. Recommended engine is the Cox .049/.051.

As with any high performance airplane, it is not recommended for beginners.

Upstart II Kit

All STAR

POPULAR SPORT BIPLANE

Designed by Romey Bukolt

The All Star is a consistent favorite of biplane fans. Its classic lines are reminiscent of the barnstorming bipes of the 30's and some of the current EAA homebuilts.

Foam wings overcome the biggest stumbling block of bipes; that is, building two wings. The other parts are precision band sawed and sanded.



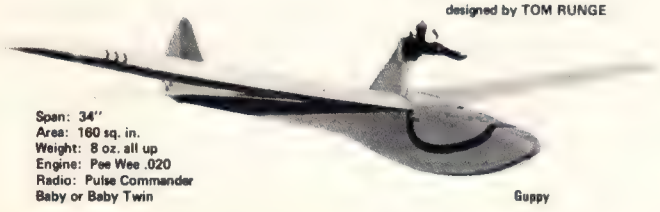
SPAN: 34 in.
AREA: 400 sq. in.
LENGTH: 29 in.
POWER: .09-.15
FUNCTIONS: Rudder-Elevator or Rudder-Elevator-Throttle

All Star Kit

FOR YOUR FIRST R/C ADVENTURE!

Guppy

designed by TOM RUNGE



Span: 34"
Area: 160 sq. in.
Weight: 8 oz. all up
Engine: Pee Wee .020
Radio: Pulse Commander Baby or Baby Twin

Guppy

A Pee Wee .020 power assist rudder only glider designed expressly for the beginner and the Pulse Commander Baby or Baby Twin radio system.

The 34" span foam wing and simple, yet attractive balsa fuselage make for quick and easy construction. Gentle flight characteristics are ideal for making the first R/C attempt successful.

PLY FUSELAGE, FOAM WING TRAINER
FOR THE NOVICE AND SPORT FLYER



ALPHA

DESIGNED BY TOM RUNGE

50L212–ALPHA KIT

The Alpha offers what most novices and sport flyers are looking for–an attractive airplane that gives durability and flyability at an economical price.

Lite plywood fuselage construction and double sparred foam wing assure the strength necessary to hold up under rigorous flight conditions.

In addition to the strength, the high wing with a flat bottom airfoil provides stable flight with good slow speed and glide characteristics.

Complete hardware included.

Alpha–the ideal small sized trainer/sport airplane from the small plane experts, Ace R/C.

the "Littlest Stick"

designed by: FRED REESE



Span: 19 1/2"
Area: 83 sq. in.
Length: 15 1/2"
Weight: 5.75 oz. all up with Baby System and Cox .010
Engine: Cox .010 or Pee Wee .020

Littlest Stick

An extension of the "Stick" concept of box fuselage, simple wing, quick construction, and good performance, the "Littlest Stick" offers snappy rudder only performance on a shoestring budget.

This is a fun plane that can be completely built and ready-to-fly in one evening and is expressly designed for the Ace Baby Rudder Only System and a Cox .010 or Pee Wee .020.

Flight performance is very agile and fast but with completely predictable response so the plane is not "antsy". Any schoolyard or even a largish backyard can do as a flying field.

A complete R/C plane kit for under $5.00 from the small plane experts, Ace R/C. Not recommended as a beginner's first attempt.

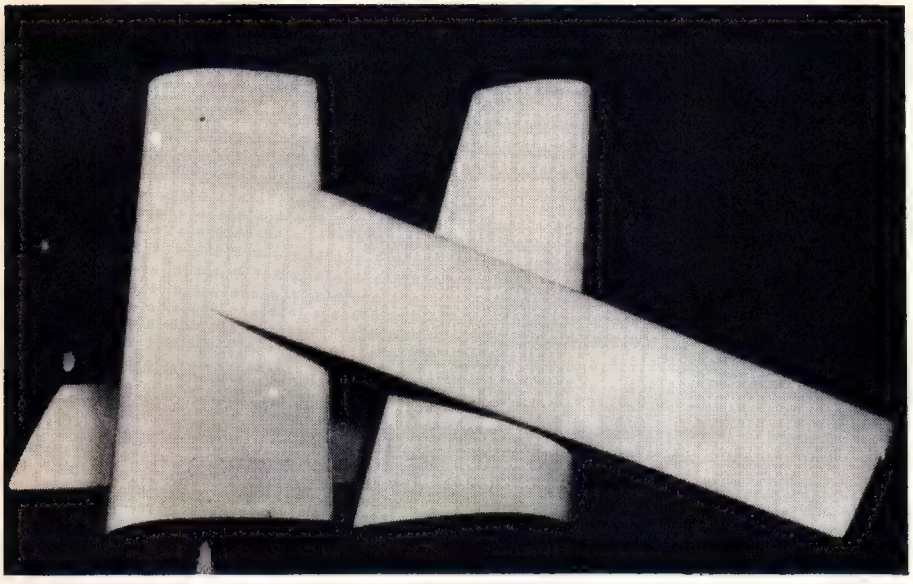


50L210–GLH II, foam wing

ACE

Ace Mini Foam Wing

FOR THE SCRATCH BUILDER



TAPERED CHORD

SPAN: 35 in.
AREA: 166.25 in.
ROOT CHORD: 5 1/2 in.
TIP CHORD: 4 in.
WEIGHT: approx. 2.5 oz.

Tapered Wing

CONSTANT CHORD

SPAN: 35 in.
AREA: 192.5 in.
ROOT CHORD: 5 1/2 in.
TIP CHORD: 5 1/2 in.
WEIGHT: approx. 3 oz.

Constant Wing

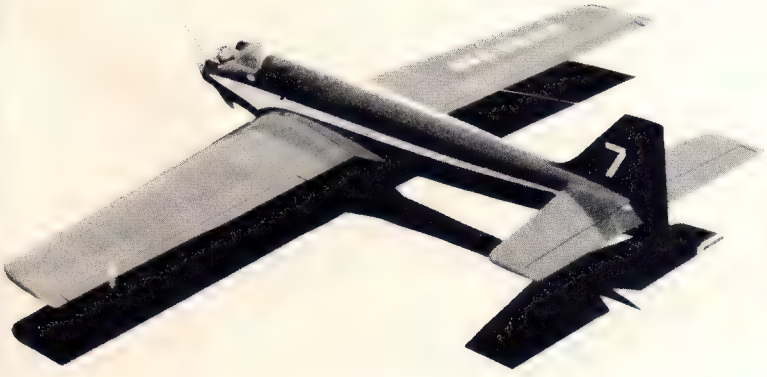
SEE PAGES 12, 13, 14, AND ABOVE FOR ACE KITS LISTED BELOW

ACE20001	ACE TAPER FOAM WING	2.95	2.85	15
ACE20002	ACE CONSTANT FOAM WING	2.95	2.85	15
ACE72100	ACE DICK'S DREAM	11.95	10.45	14
ACE72102	ACE UPSTART II	17.95	13.95	14
ACE72105	ACE WHIZARD	18.95	14.50	14
ACE72107	ACE PACER	19.95	15.25	12
ACE72108	ACE MACH-NONE	19.95	15.25	12
ACE72109	ACE SUPER PACER	32.95	24.75	13
ACE72111	ACE LITTLEST STICK	3.95	3.80	14
ACE72112	ACE AEROCOMMANDER SHRIKE	29.95	22.50	13
ACE72113	ACE GUPPY 02 POWER GLIDER	8.95	7.50	14
ACE72114	ACE 50L212 ALPHA	19.95	15.25	14
ACE72200	ACE ALL STAR BIPE	24.95	17.95	14
ACE72210	ACE 50L210 1/2 A GLH II (FOAM)	16.95	13.15	14

AIRBORNE MFG.

SUPER!

PHOENIX SEVEN



EPOXY-GLASS .60 SIZE:

This outstanding design features an epoxy-glass fuse, foam wing and stab cores, machine cut wood parts, all special hardware, full plans, and instructions. Span 63", Area 690 square inches, Engine .60, and flying weight of 7½ to 8½ pounds.

BALSA .40 SIZE:

Same outstanding design only this time in a .40 size all balsa kit. Features beautifully machine cut wood parts including wing ribs. Kit includes all special hardware, formed landing gear, Bridi .40 size motor mount, and a fiberglass nose cowl. Full plans and instructions complete this excellent kit. Span 58", Area 565 sq. in., Engine .40 size, and weight of about 6 pounds.

AAS73000	AIRBORNE PHOENIX 7 .40 WOOD	63.50	56.95
AAS74100	AIRBORNE PHOENIX 7 .60 (GLASS)	134.95	114.95

AIR FORMS INC.

THE SABRES ARE HERE !!



SPORT - STANDOFF SCALE

AIR-FORMS, INC. presents to you the exciting North American F-86 in ducted fan form. This kit is designed for the Sunday flyer and serious scale modeler alike. It cna be built and flown on a modest budget, or given the full treatment, be a winner in any Standoff Scale contest. Our concept, with this first offering, is to bring the realm of jet aircraft to the average modeler without destroying his pocketbook. Other jet aircraft will follow as they are developed, always keeping in mind the needs of the sport modeler.

Our kits are designed to be light, easy to build, and have a minimum number of parts. All balsa parts are machine-cut and selected for lightness and strength as required. The fuselage is light weight epoxy-glass and the wing cores are foam. Tail surfaces are sheet balsa. Decals and proof of scale are furnished in the kits. Landing gears are pre-bent and a scale canopy is provided.

Along with the usual plans and building instructions, we take you through the installation and flying aspect of ducted fans.There is a special section on increasing the performance of your aircraft at minimal cost, other engines and their performance ranges, flying techniques unique to ducted fan aircraft, and other practical ideas. A fan unit is NOT included in each kit. We recommend the MIDWEST RK-40 fan unit and installation instructions are provided. A 4 channel radio is required.

The F-86 flight performance is as a jet fighter should be! The light wing loading and low overall weight combined with a non-critical airfoil result in flight response that is excellent. Depending on your resources and desires, you can power the aircraft with a regular front rotor .40 or move into the newer ABC type racing engines. Check out the data below and join us in the world of the jets!!

SPECIFICATIONS:

* Wingspan - 49 in.
* Wing Area - 616 sq. in.
* Weight - 6 lbs. (ready to fly)
* Wing Loading - 22.8 ozs./sq. ft.
* Fuselage Length - 50 in.
* Engine - .40 front rotor (basic)

PLUS . . . .

This outstanding kit now comes with a 50 page color scale data booklet that shows many authentic paint schemes along with all specifications and details of the real aircraft. This booklet is everything you would ever need for proof-of-scale documentation.

AFM74000 AIR-FORMS F-86 DUCTED FAN JET 134.95 ' 114.95

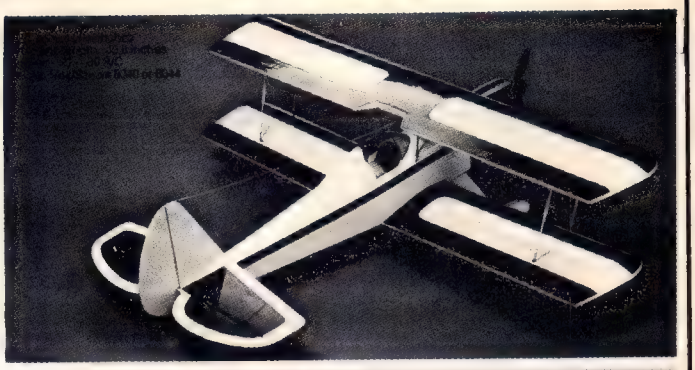
AIRTRONICS

AIRTRONICS KITS ARE ALL BALSA

Acro Star

High performance with scale appearance.

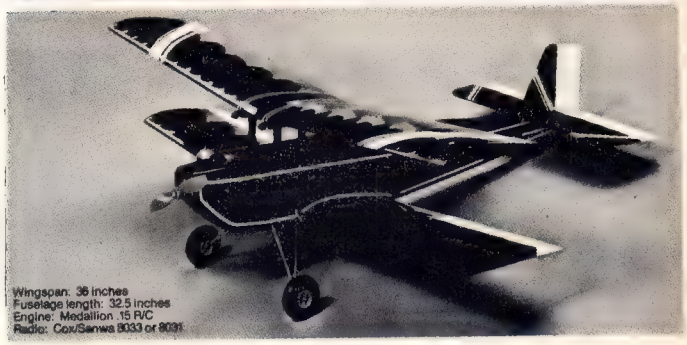
Flies as good as it looks. Fully acrobatic for the advanced flier. Extra rugged structure to withstand flight and landing stresses. Highly pre-fabricated with complete hardware. For .40—.60 sized engines and 4-channel radio systems.



Gere Sport

Simple stand-off scale power model.

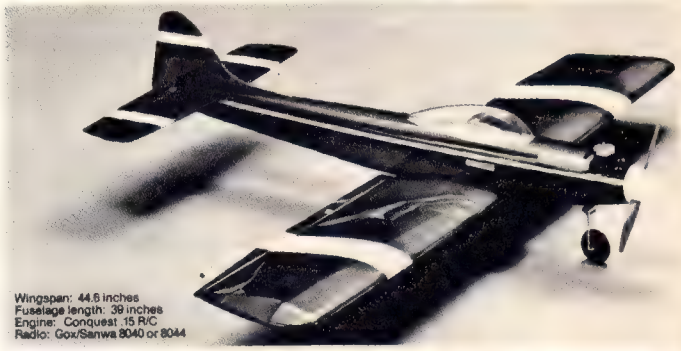
Building the Gere is easier than many single-wing kits. Capable of all 3-channel aerobatics, this ship offers high performance with compact size. For 3-channel radios and sport .15 R/C engines.



New Era

Fully aerobatic sport pattern model for .19 to .25 engines.

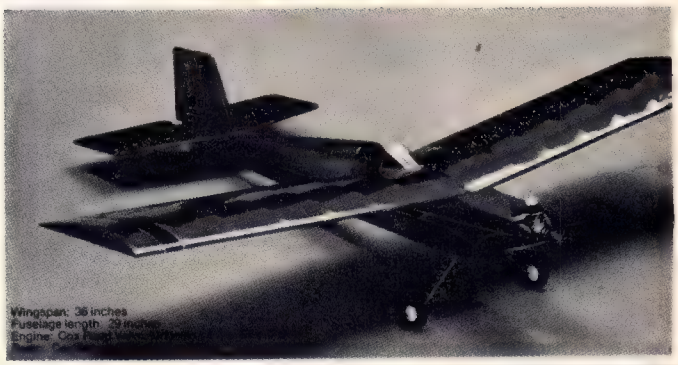
This compact ship will perform as well as the larger ships with the additional advantage of economical flying. The Conquest .15 R/C is the ideal power plant. For 4-channel radios.



S-Tee

Shoulder wing version of the popular Q-Tee.

This new kit offers a step-up model with room for a throttle control servo. Same rugged structure and ease of building as the Q-Tee. For 2 or 3 channel radios and Cox .049 engines.



Q-Tee

The most popular ½ A trainer in the country.

Designed for the novice. This model is very easy to build and fly. Rugged structure helps to survive pilot error. For 2-channel control and Cox .049 reed valve engines.



AIR71102	AIRTRONICS 102 Q-TEE 1/2 A	21.95	17.95
AIR71103	AIRTRONICS 103 GERE SPORT	39.95	31.95
AIR71104	AIRTRONICS 104 S-TEE	21.95	17.95
AIR72302	AIRTRONICS 302 NEW ERA III	49.95	38.75
AIR74301	AIRTRONICS 301 ACRO-STAR BIPE	89.95	67.45

ANDREWS

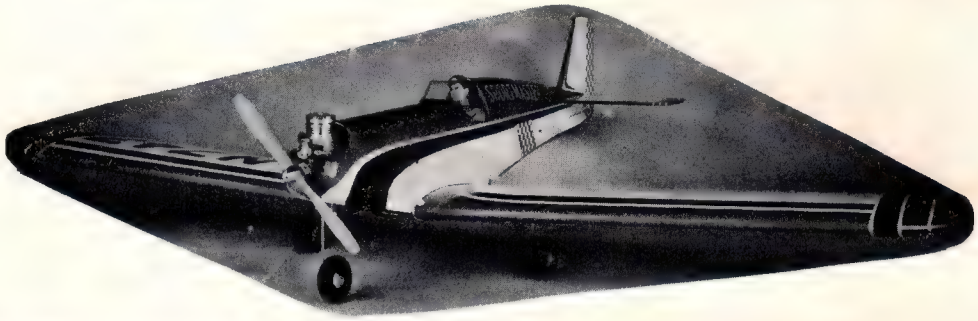
AEROMASTER SPECIFICATIONS:



ARC-3 AEROMASTER "TOO"

Wingspan: 52½ in. Area: 910 sq. in.
Engine: .60 - .78 Weight: 6-7 lb.
Material: Balsa
The most sought-after kit in the world. AAmco quality and precision engineering throughout.

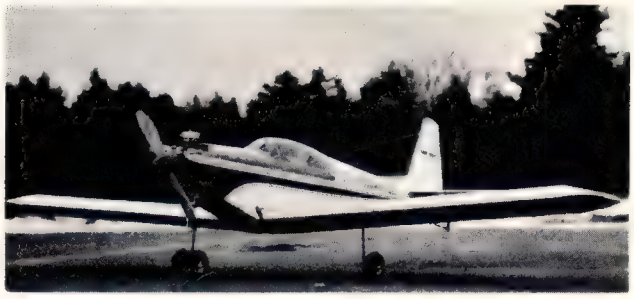
SPORTMASTER SPECIFICATIONS:



ARC-4 SPORTMASTER

Wingspan: 65 in. Area: 715 Sq. in.
Engine: 40 - 78 Weight: 6-7 lbs.
Material: ———————— All Balsa
A constant chord wing full house real looking model that can be built easy and fast. The sportmaster is capable of pattern flying and also can be used for all out free-style flying along with being an all around darned good sport - fun flyer.

SPECIFICATIONS:

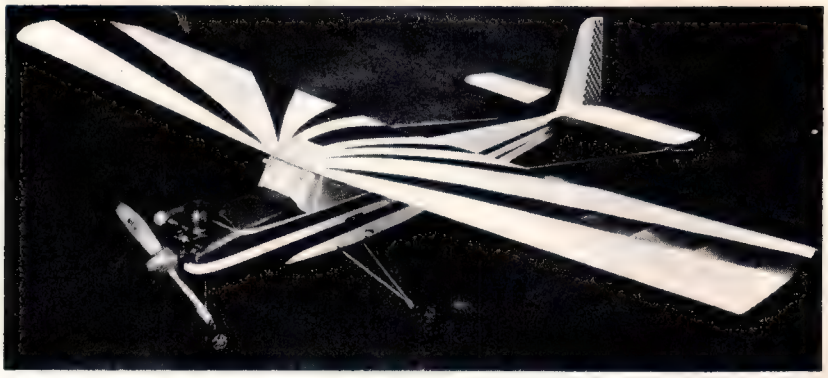


ARC-5 TRAINERMASTER

Wingspan: 53½ in. Area: 575 sq. in.
Engine: 40-60 Weight: 4½-5½ lb.
Material: Balsa
For the particular multisport RC modeler. Maximum training in minimum time. Another engineering and performance triumph. Really quick assembly.

For the *Particular* Multi *Sport* R/C Modeler

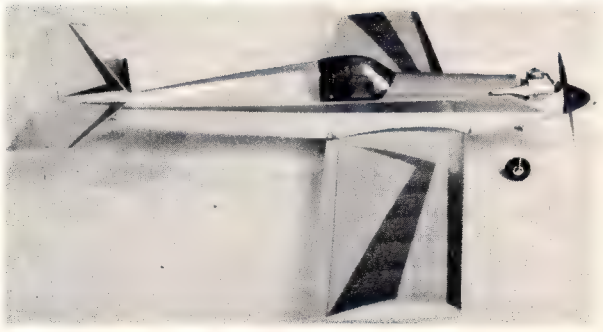
SPECIFICATIONS:



ARC-6 A-RAY

Wingspan: 52½ in. Area: 480 sq. in.
Engine: 19-40 Weight: 3½-4½ lb.
Material: Balsa
Take it off! Have a ball! The A-Ray does it all! All quality and craftsmanship in an aerobatic high-winger.

SPECIFICATIONS:



ARC-7 MINIMASTER

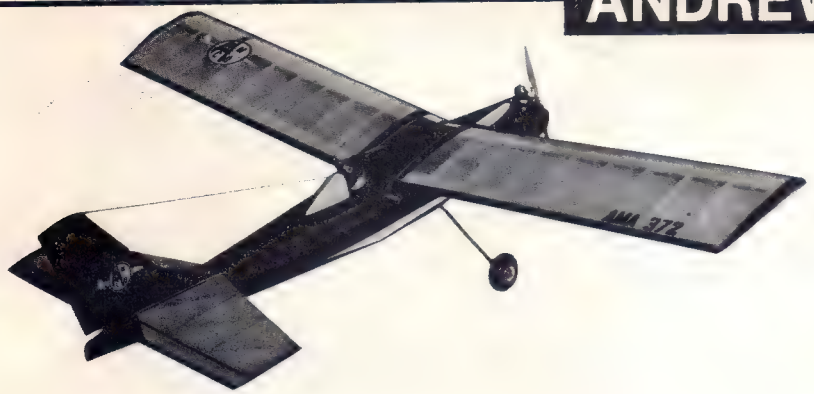
Wingspan: 49½ in. Area: 420 sq. in.
Engine: 19-25 Weight: 3-3¼ lb.
Material: Balsa
Think you built fast before? See what precision engineering can do. Complete hardware and canopy. King of small multimodels.

DESIGNED by Lou Andrews

Featuring ...

BOX-LOK Construction

ANDREWS



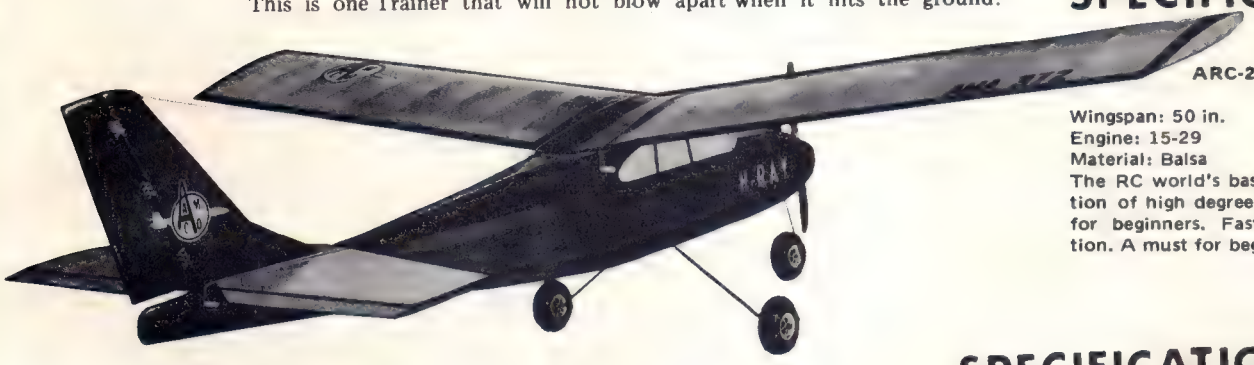
SPECIFICATIONS:

ARC-1 S-RAY

Wingspan: 50 in. Area: 425 sq. in.
Engine: 15-29 Weight: 3-4
Material: Balsa
The economy basic trainer, companion of the H-Ray. The fastest construction of any kit in the world except ours.

A Kraftsmanship kit processed with AAMCO GOLD BALSA-
This is one Trainer that will not blow apart when it hits the ground!

SPECIFICATIONS:



ARC-2 H-RAY

Wingspan: 50 in. Area: 425 sq. in.
Engine: 15-29 Weight: 3-4 lb.
Material: Balsa
The RC world's basic trainer. Prefabrication of high degree. Docile performance for beginners. Fast Box-Lok construction. A must for beginners!

SPECIFICATIONS:



ARC-8 BIG-H ray

Wingspan: 56 in. Area: 560 sq. in.
Engine: 19-45 Weight: 4-4¾ lbs.
Material: All balsa with Ply. where needed —

The BIG-H is the big brother to the popular H-RAY Basic Trainer and is designed as a Primary Trainer and will become the Standard in the 40 class of trainers. It is strong and can take the same rigors of flying as the infamous H-RAY. With our proven BOX-LOK method of construction, it is a cinch to build and has new features and looks that no other trainer in the world can boast of. As usual, it is all quality and engineering as only AAmco can produce in a fine line of highly pre-fabricated R/C kits.



SPECIFICATIONS:

ARC-9 QUIKRAY-500

Wingspan: 50+ in. Area: 503 sq. in.
Engine: 19—45 Weight: 3½ lbs.
Material: All Balsa with Ply. where needed.
This baby is strong as a Bull but is light. This Baby will turn the Pylon tighter than anything you have seen and will not snap or stall out. It can be built complete and into the air from the kit box if covered with materials such as Super MonoKote in twelve to fifteen hours.

FAST IS WHAT SHE IS — AND DOCILE!

AND72002	ANDREWS ARC-2 H-RAY	39.95	29.95	19
AND72007	ANDREWS ARC-7 MINIMASTER	44.95	33.75	18
AND73005	ANDREWS ARC-5 TRAINERMASTER	52.95	39.70	18
AND72001	ANDREWS ARC-1 S-RAY	34.95	26.25	19
AND73006	ANDREWS ARC-6 A-RAY	44.95	33.75	18
AND73008	ANDREWS ARC-8 BIG-H RAY	49.95	37.50	19
AND73009	ANDREWS ARC-9 QUICKRAY-500	49.95	37.50	19
AND74003	ANDREWS ARC-3 AEROMASTER TOO	74.95	56.25	18
AND74004	ANDREWS ARC-4 SPORTMASTER	69.95	52.50	18

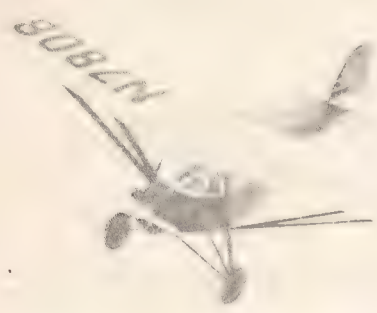
ASTRO FLIGHT (AFI)



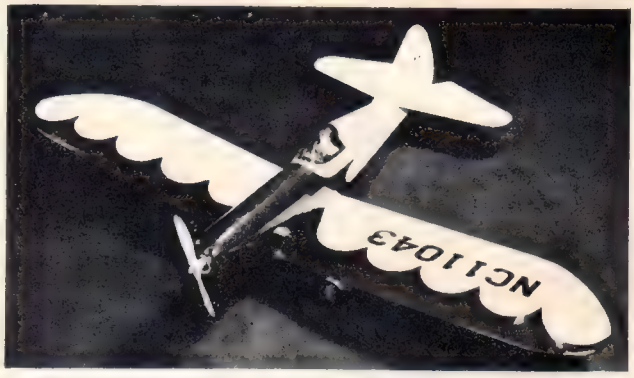
ELECTRA FLY. An electric powered sport flyer designed for back yard fun. Its simple construction and hands off stability make it a great trainer when powered by an Astro 05 electric or .049 glow motor. When powered by an Astro 10 its snappy performance will delight the sport flyer. This all balsa kit contains the motor mount and air scoops and other hardware for electric motor installation. Wing span 48 in., wing area 388 sq. in., for three channel radio, flying weight 32 to 45 ounces.



BUSHMASTER. A hi wing semi-scale design reminscent of Canadian bush planes designed for Astro 15 or 25 electric systems or .15 or .25 cu. in. glow motors. Its simple construction, stable aerodynamics, and snappy performance makes it ideal for the sport flyer. Air scoops and motor mount for electric motor are included in the all balsa kit. Wing span 60 in., wing area 600 sq. in., three channel radio, flying weight 4½ lbs.



THE VELIE MONOCOUPE was one of the most popular monoplanes of the golden era of aviation. This great kit of an old time favorite will delight scale and sport fans alike. Its open frame construction makes for light weight quick building and is ideal for covering with silk and dope or the new synthetic films. The kit contains all precision cut wood parts and necessary hardware. Designed for the Astro 05 electric systems or a 049 to 09 glow motor. Wing span 48 in., wing area 388 in., three channel radio, flying weight 32 ounces.



THE GEE BEE MODEL D SPORTSTER. One of the most famous of the sport/racing designs of the golden era. Just as the Gee Bee delighted its pilots with its spirited performance so will this model. The kit features the quick building open frame construction designed for fabric covering or for the new synthetic film coverings. This deluxe kit contains precision cut wood parts and all necessary hardware. It is designed for the Astro 05 electric system or an 049 glow engine. Wing span 43 in., wing area 285 sq. in., for three or four channel radio, flying weight 32 ounces.



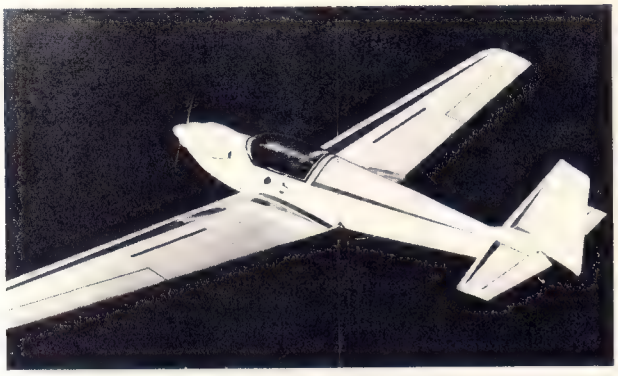
THE PARTENAVIA P68 VICTOR. The P68 Victor is one of the most exciting light twin aircraft of recent times. Its clean lines and aerodynamic efficiency make it a perfect subject for an electric mini twin. The model has amazing performance on the Astro 05 twin propulsion system and can perform loops, rolls and other aerobatic maneuvers with great realism, it always draws a crowd. Wing span 56 in., wing area 460 sq. in., three or four channel radio, flying weight 4 lbs.



THE ELECTRA TWIN. The Electra Twin is the most advanced electric model available. Its speed and maneuverability are almost unbelievable. Most Class A and B aerobatic maneuvers can be performed quite easily by this large graceful model. Its distinctive design and swift positive flight have thrilled crowds for over two years of flight demonstrations, and the distinctive twin engine sound adds that extra dimension to competition aerobatics. The kit features a fiberglass fuselage, and machined balsa wood parts. Wing span 72 in., wing area 770 sq. in., for four channel radio, Astro 25 twin propulsion system, flying weight 8¼ lbs.

ASTRO FLIGHT (AFI)

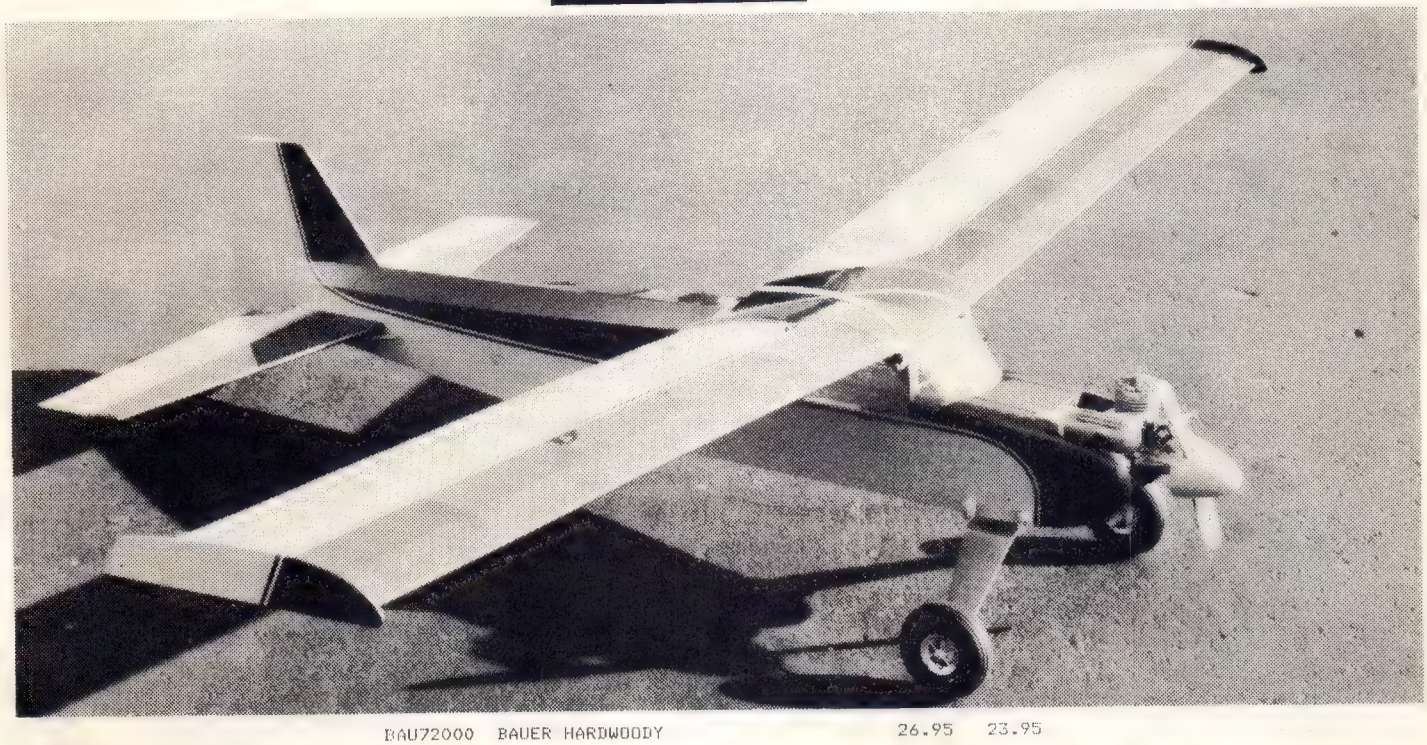
FOURNIER RF-4 Motorglider's an eye catching scale model of the classic Volkswagen powered motor glider, made world famous by Mira Slova's transatlantic flight. This all balsa kit is designed to accept the astro 15 motor or a glo .15 cu. in. engine. Its simple construction and gentle flying habits suit the Sunday flyer, and its classic beauty makes it a perfect project for the serious scale builder. Wing span 72 in., wing area 600 sq. in., Astro 15 or Glow 15, three or four channel radio, flying weight 48 to 64 ounces.



AFI71003	AFI FOURNIER RF/4 MOTOR/GLIDER	44.95	32.60	21
AFI71005	AFI ELECTRA-FLI MOTOR/GLIDER	24.95	19.00	20
AFI71006	AFI BUSHMASTER MOTOR/GLIDER	44.95	33.75	20
AFI71007	AFI ELECTRA 225 TWIN	99.95	74.50	20
AFI71008	AFI P-68 VICTOR TWIN	44.95	35.95	20
AFI72000	AFI VELIE MONOCOUPE	34.95	27.95	20
AFI72100	AFI GEE BEE MODEL D SPORTSTER	34.95	27.95	20

SEE PAGE 145 FOR ASTRO ELECTRIC POWER SYSTEMS DESIGNED FOR THESE KITS.

BAUER



BAU72000	BAUER HARDWOODY	26.95	23.95

THE HARDWOODY is a handsome, good flying model of moderate size and weight. It is satisfying to build as well as fly. Its durability and size will keep it from ever becoming a major expense. Its pleasant, non-critical flight characteristics will counteract that rusty feel you get when the demands of work, school or family keep you from the controls for long periods. If you get really rusty it is strong enough to be landed routinely in bushes and small trees without ending up looking like a bunch of sticks in a bag.

KIT FEATURES:
- Precision machined parts
- Quality plywood
- Select hard & softwoods
- Full size plans
- Complete instructions

- .15 or .19 engines, 2 or 3 channel
- 48 in. wing span, 360 in^2 area
- 2.5 to 3.5 lb. flying weight
- 16 to 23 oz / ft^2 wing loading

HARDWARE INCLUDED:
- Formed aluminum landing gear
- Formed tail gear
- Nylon hinges
- Nylon control horns (2)
- Die cut windscreen
- Screens & Nuts

BRIDI

BRIDIKITS For

DIRTY BIRDY .40



- .40 Engine
- 4-5 Channels
- 58" Wing Span
- 565 sq in Wing Area

All Balsa Construction with Epoxy-Glass Cowl, Canopy, Special Hardware, and Bridi Engine Mount.
Will Accept Some Retracts

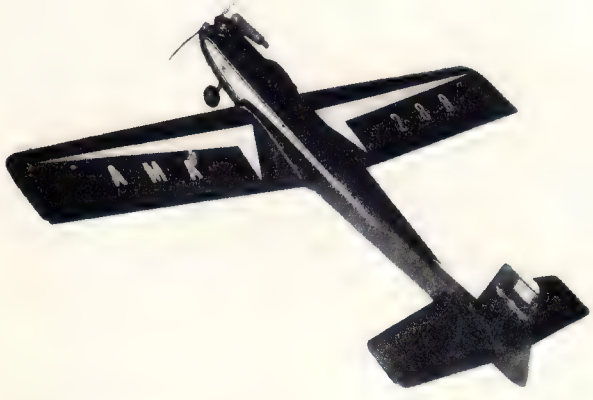
SUPER KAOS .60



- .60 Engine
- 4-5 Channels
- 58½" Wing Span
- 644 sq in Wing Area

All Balsa Construction with Machine Cut Parts, Canopy, Special Hardware, Fixed Gear and Building Notes

KAOS .60



- .60 Engine
- 4 Channels
- 58½" Wing Span
- 644 sq in Wing Area

All Balsa Construction with Machine Cut Parts, Canopy, Special Hardware, Fixed Gear and Building Notes

SUPER KAOS .40



- .40 Engine
- 4 Channels
- 52" Wing Span
- 507 sq in Wing Area

All Balsa Construction with Machine Cut Parts, Canopy, Special Hardware, Fixed Gear and Building Notes

BRI73006	BRIDI SUPER KAOS 40	55.95	41.95	22
BRI73010	BRIDI DIRTY BIRDY 40 WOOD	59.95	44.95	22
BRI74003	BRIDI KAOS 60	66.95	50.20	22
BRI74004	BRIDI SUPER KAOS 60	69.95	51.95	22
BRI74006	BRIDI DIRTY BIRDY 60 (GLASS)	124.95	93.70	23
BRI74007	BRIDI DIRTY BIRDY 60 (WOOD)	84.95	63.75	23
BRI74011	BRIDI UFO (FIBERGLASS)	129.95	97.50	23

BRIDI

PATTERN FLYING

ANNOUNCING
JOE'S NEWEST

THE U.F.O.



- 64½" Wing Span
- 692 sq. in. Area

Designed for a .60 pump and pipe with retracts the UFO has an epoxy-glass fuse and fin, foam wing and stab., swept-back wing and anhedral stab. The kit includes fixed gear, engine mount, and building notes.

DIRTY BIRDY .60

THE CONTEST WINNING
DIRTY BIRDY



AVAILABLE AS

All Balsa Construction with Canopy, Special Hardware, Fixed Gear, Plans & Building Notes

Epoxy-Glass Fuse & Fin, Foam Wing & Stab with Balsa Sheeting, Fixed Gear, Plans & Building Notes

- .60 or .60 pump
- 64" Wing Span
- 4-5 Channels

FAST AND SMOOTH IN THE AIR, DESIGNED TO FLY THE EXPERT PATTERN

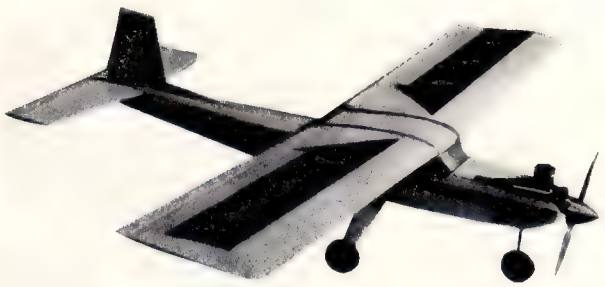
BRIDI

BRIDIKITS For

THE BRIDI FAMILY OF RCM TRAINERS OFFER WHAT YOU WANT IN A QUALITY R/C KIT

Stable, predictable, good-flying models that land slow with no tip stall tendencies. Simple, rugged all balsa construction with machine cut parts. Special hardware and complete building instructions.

RCM TRAINER 60



• .40-.60 ENGINES • 60" WING SPAN • 4 CHANNELS

All Balsa Construction with Machine Cut Parts
Special Hardware, Plans, Building Notes

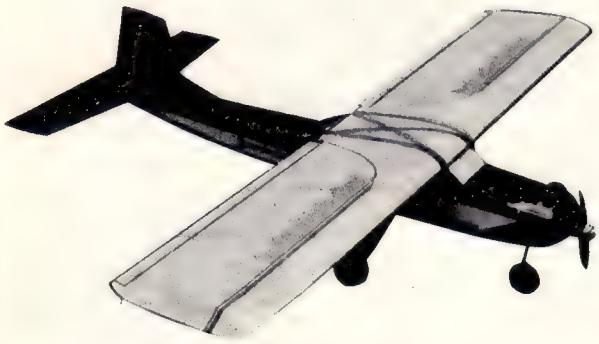
RCM TRAINER 40



• .29-.40 ENGINES • 50" WING SPAN • 4 CHANNELS

All Balsa Construction with Machine Cut Parts
Special Hardware, Plans, Building Notes

RCM TRAINER 20



• .15-.35 ENGINES • 45½" WING SPAN • 3-4 CHANNELS

All Balsa Construction with Machine Cut Parts
Special Hardware, Plans, Building Notes

RCM TRAINER 10



• .09-.15 ENGINES • 36¾" WING SPAN • 3 CHANNELS

All Balsa Construction with Machine Cut Parts
Special Hardware, Plans, Building Notes

BRI72000	BRIDI QUICKEST 200	24.95	18.70	25
BRI72001	BRIDI RCM BASIC TRAINER	39.95	29.95	25
BRI72002	BRIDI RCM TRAINER 20	34.95	26.20	24
BRI72005	BRIDI SPORTSTER	39.95	29.95	25
BRI72007	BRIDI RCM TRAINER 10	27.95	20.95	24
BRI72008	BRIDI SUN FLI 4-20	29.95	22.50	25

BRI73005	BRIDI CLASSIC 40	54.95	39.95	25
BRI73007	BRIDI RCM TRAINER 40	54.95	39.95	24
BRI73009	BRIDI TWEEDY BIRD	39.95	29.95	25
BRI73015	BRIDI QUICKEST 500	42.95	32.20	25
BRI73500	BRIDI 15-500	39.95	29.95	25
BRI74002	BRIDI RCM TRAINER 60	62.95	47.20	24

BRIDI

TRAINER/SPORT FLYING

CLASSIC 40



• .24-.45 ENGINE • 52" WING SPAN • 4 CHANNELS

All Balsa Construction with Machine Cut Parts
Bridi Engine Mount, Special Hardware, Canopy

SUN FLI 4-20



• .14-.25 ENGINE • 48¾ WING SPAN • 3-4 CHANNELS

All Balsa Construction with Machine Cut Parts
Special Hardware. Canopy not included in kit

QUICKEST 500



• 40 ENGINE • 50¼ WING SPAN • 4 CHANNELS

All Balsa Construction with Machine Cut Parts
Meets Minimum Rules. Canopy and Special Hardware

QUICKEST 200



• .051 ENGINE • 31¼ WING SPAN • 2 CHANNELS

All Balsa Construction with Machine Cut Parts
Plans, Bridi Engine Mount, Special Hardware

RCM BASIC TRAINER



• .15-.19 ENGINES • 50" WING SPAN • 3 CHANNELS

All Balsa Construction with Machine Cut Parts
Plans, Special Hardware, Building Notes

SPORTSTER



• .19-.35 ENGINES • 50" WING SPAN • 4 CHANNELS

All Balsa Construction with Machine Cut Parts
Special Hardware, Canopy, Building Notes

15-500



• .19-.40 ENGINES • 51" WING SPAN • 3-4 CHANNELS

All Balsa Construction with Machine Cut Parts
Special Hardware, Bridi Engine Mount, Building Notes

TWEEDY BIRD



• .19-.29 ENGINES • 48¾ WING SPAN • 4 CHANNELS

All Balsa Construction with Machine Cut Parts
Epoxy-Glass Cowl, Special Hardware, Bridi Engine Mount

BRIDI

BRIDIKITS For

P-51 MUSTANG



- .60 ENGINE
- 64¾ WING SPAN
- FLAPS & RETRACTS

Epoxy-glass Fuse and Fin, Foam Wing, Flaps, Fixed Gear
Special Hardware, Plans, Building Notes

BROWN B-2



- .60 ENGINE
- 59" WING SPAN
- 5 CHANNELS

Epoxy-glass Fuse, Fin, and Wheel Pants, Foam Wing
Special Hardware, Flaps, Fixed Gear, and Data Sheet

CHIPMUNK



- .40 Pump or .60
- 58" WING SPAN
- 4 CHANNELS

Epoxy-glass Fuse, Fin, and Wheel Pants, Foam Wing
Fixed Gear, Special Hardware, Bridi Motor Mount, Plans

LOCKHEED

SIRUS



- .60 ENGINE
- 64" WING SPAN
- 4 CHANNELS

Epoxy-glass Fuse, Fin, and Wheel Pants, Foam Wing
Built-Up Stab., Special Hardware, Fixed Gear and
Data Sheet

BRI74008	BRIDI P-51 FIBERGLASS	134.95	101.20
BRI74009	BRIDI BROWN B-2 (FIBERGLASS)	134.95	101.20
BRI74012	BRIDI SUPER CHIPMUNK (GLASS)	124.95	93.70
BRI74013	BRIDI LOCKHEED SIRUS (GLASS)	134.95	101.20

BRIDI

STAND-OFF SCALE AT-6 TEXAN



- .60 ENGINE
- 62" WING SPAN
- FLAPS & RETRACTS

Epoxy-glass Fuse, Foam Wing, Special Hardware, Fixed Gear

SUPER FLI



- 60 ENGINE
- 60½ WING SPAN
- 4 CHANNELS

Balsa Fuse, Fin, & Stab with Machine Cut Parts, Foam Wing

T-28



- 60 Engine
- Glass/Foam
- Retracts/Flaps

SPITFIRE



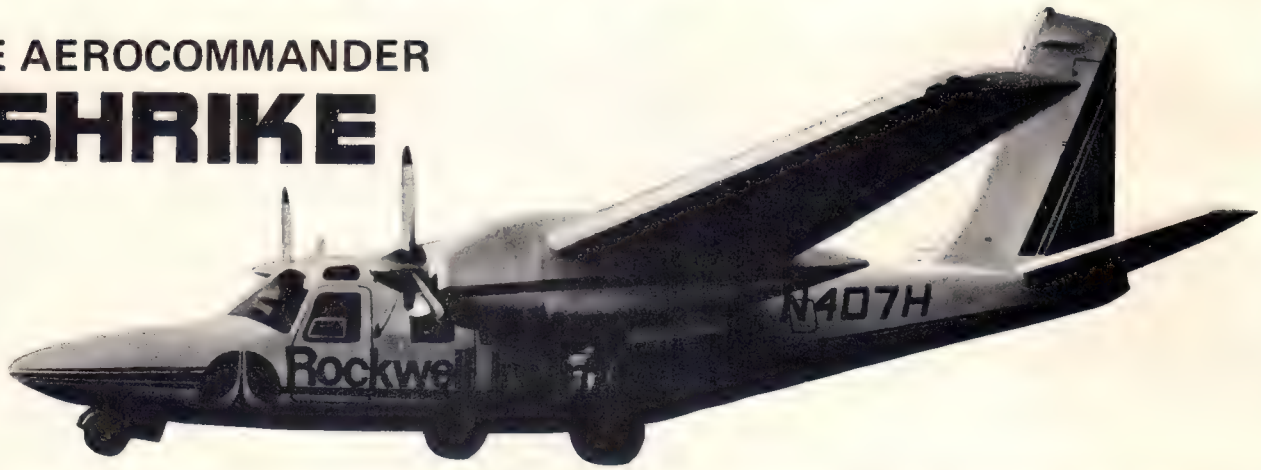
- 60 Engine
- Glass/Foam
- Retracts/Flaps

BRI74010	BRIDI AT-6 TEXAN (FIBERGLASS)	134.95	101.20
BRI74016	BRIDI KRAFT SUPER FLI (BALSA)	92.95	69.70
BRI74017	BRIDI T-28 (GLASS)	134.95	101.20
BRI74018	BRIDI SPITFIRE (GLASS)	134.95	101.20

BRIDI

BRIDIKITS For STAND-OFF SCALE

THE AEROCOMMANDER SHRIKE



• 2.40 ENGINES • 79½" WING SPAN • 715 sq in WING SPAN • FLAPS AND RETRACTS

Epoxy-glass Fuse, Hacelles, and Cowl, Foam Wing with 1/64 Ply Sheeting, Special Hardware and Fixed Gear

WACO METEOR

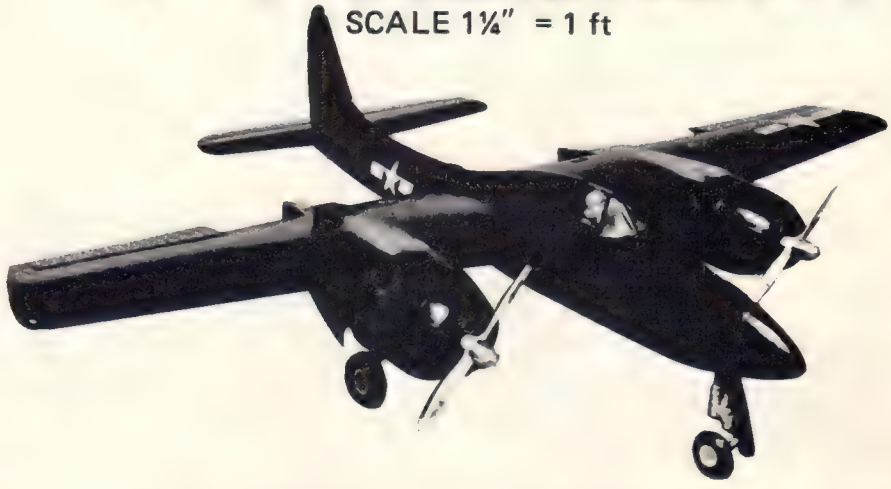


• .60 ENGINE
• 62" WING SPAN
• FLAPS & RETRACTS

Epoxy-glass Fuse, Foam Wings, Canopy, Fixed Gear

F-7 TIGERCAT

SCALE 1¼" = 1 ft



• 2 .40 ENGINES • 65" WING SPAN • 775 sq in WING AREA • RETRACTS AND FLAPS

Epoxy-glass Fuse, Macelles, and Cowl, Foam Wing with Sheeting, Special Hardware and Fixed Gear

BRIDI

BRIDIKITS For 1/4 SCALE

COSMIC WIND



- 60 Engine
- 816 Sq in Wing Span
- 64" Wing Area
- 4 Channels

A new ¼ scale Bridikit. Includes epoxy-glass fuse, cheek cowls & wheel pants, foam wing, fin, and stab with sheeting. Flys aresti pattern. No prop reduction needed.

CORBIN ACE



- .60 Pump or Prop Drive
- Balsa Construction Epoxy-Glass Cowl & Wheel Pants
- 4 Channels

BRI74005	BRIDI AERO COMMANDER SHRIKE	184.95	133.25	28	BRI74100	BRIDI COSMIC WIND 1/4 SCL-GLAS	139.95	104.95	29
BRI74014	BRIDI WACO METEOR (GLASS)	99.95	74.95	28	BRI74110	BRIDI CORBIN ACE-1/4 SCALE	129.95	97.50	29
BRI74015	BRIDI F-7 TIGERCAT (GLASS)	198.95	149.20	28					

COX

1/2-A RADIO CONTROLLED Cessna Centurion

Almost Ready-to-Fly



An exciting new product that brings the world of Radio Control flight to everyone!

This unique, almost ready-to-fly scale model lets you enjoy the thrill of controlling a miniature aircraft without time consuming construction requiring special skills. The easy starting Cox QRC .049 engine is already installed and the model is finished with high gloss fuel-proof paint. Pressure sensitive decals and a roll of striping tape are furnished so that you can duplicate the appearance of a real Cessna.

Designed for the Cox/Sanwa two-channel R/C system (Catalog Number 8020), radio installation is quick and easy. Cavities are molded in the fuselage to mount the battery box, receiver and servos. Even the switch mount and antenna restraint are pre-molded. The control surfaces are hinged and the pushrods are installed and ready for connecting to the servos.

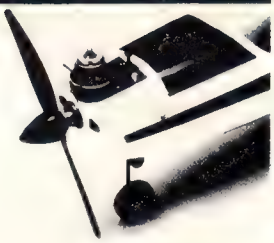
FEATURES

- Complete with engine, propeller, spinner, wheels, and control linkages. Everything but the Radio Control system.
- Attractive scale appearance. Looks just like the Cessna at the local airport. Authentic trim and markings.
- Muffled QRC .049 engine with spring starter permits flying in confined areas.
- Lightweight durable molded airframe with formed wire tricycle landing gear and pop-off wing help absorb crash landings.
- Easy to fly. Stable, high-wing design with semi-symmetrical airfoil provides steady, smooth flight even in windy conditions.

SPECIFICATIONS

	Inches	Metric
Wing Span	36.22 inches	920 mm
Wing Area	225.0 sq. inches	14.5 dm²
Fuselage Length	29.0 inches	737 mm
Airfoil	12.5% Thick Semi-Symmetrical	
Total Flying Weight (w/Cox/Sanwa 8020)	18.7 ounces	530 gms

Power Cox QRC .049 (.819 c.c.) with 6" dia. x 3" pitch nylon propeller & spinner.



Sportavia

New ready-to-fly R/C Trainer— Uses 2-channel radio.



Large 70" wingspan for slow flight and soaring performance. This new ready built model is even easier to fly than the popular Cox Cessna Centurion. Two piece wing for easy transportation. Complete with Cox .049 QRC engine and all hardware. Unique molded cavities inside the fuselage allow quick radio installation. Factory finished in gleaming white with pressure sensitive decals. No building or finishing required.

Wingspan: 70.0 inches
Fuselage Length: 36¾"
Engine: Cox QRC .049 (installed)
Radio: Cox/Sanwa 8020 or 8022 (not included)

No. 900402 SPORTAVIA	
Package Size	35[illegible] x 7¾ x 4[illegible]
Package Weight	2.9 lbs
Shipper Size	14¾ x 15¾ x 36
Shipper Weight	22 lbs
Cube	5.0 cubic feet
Pack	6

THESE KITS ARE FANTASTIC!!

These ready-to-fly models only need the addition of a radio and they are ready to go. They make a great beginner's airplane due to ease of flight and tremendous durability while at the same time they are a super change of pace for the veteran. They are outstanding values in every respect. All you have to do is decide if you want a high wing or a low wing plane, then order either the Cessna Centurion or the Sportavia. See page 214 for Cox #880 starting kits & Page 142 for Cox/Sanwa radios (Model No. 8020 or 8022 is recommended). Any radio will work fine, however the Cox/Sanwa's fit without alteration.

COX72401	COX 401 CESSNA CENTURION RTF	54.95	43.95	30
COX72402	COX 402 SPORTAVIA RTF TRAINER	69.95	53.95	30

CONCEPT MODELS

AIRCRAFT KITS



Top quality radio controlled models designed for easy building.

	Travel Air	Kraft Super Fli	Barnstormer	Air Scout
Wing Span	52″	53″	49″	54″
Wing Area	790 si.	500 si.	760 si.	490 si.
Weight	76-84 oz.	76-84 oz.	76-84 oz.	50-58 oz.
Engine size	.40	.40	.40	.15-.25
No. Channels	4	4	4	3-4

Concept Models aircraft kits contain all balsa, plywood and spruce construction, with precision cut parts for *exact fit*, full-size blue-line drawings and clear, easily understandable instructions with assembly details.

CON72000	CONCEPT AIRSCOUT	39.95	31.95
CON73000	CONCEPT BARNSTORMER BIPE	69.95	55.95
CON73100	CONCEPT SUPER FLI	69.95	55.95
CON73200	CONCEPT TRAVELAIRE	69.95	55.95

CRAFT-AIR

Buhl BULL PUP

Type . . . . . Sport scale
Engine . . . . . .09 - .15
Controls . . . . . .2 or 3 channels
Wing . . . . . Balsa & spruce - flat bottom
Fuselage .Formed plastic with plywood & balsa
Wing Span . . . . . 42 in.
Wing Area . . . . . 269 sq. in.
Flying Weight . . . . . 25 - 32 oz.
Wing Loading . . . . . .13 to 17 oz./sq. ft.



PK-1

With so many pre-formed and pre-machined parts, the Craft-Air BULL PUP is very quick and easy to build. The flat bottom airfoil with the light wing loading makes it very easy to fly. These features, combined with the exceptionally rugged construction, make the BULL PUP an ideal trainer and sport ship with eye appeal.

CRA72001	CRAFT-AIR PK-1 BUHL BULL PUP	34.95	27.95
CRA72002	CRAFT-AIR PK-2 BUTTERFLY II	49.95	37.50

Butterfly II

Wing Span . . . . . 99 in.
Wing Area . . . . . 916 sq. in.
Airfoil . . . . . Flat bottom (Craft-Air Windrifter)
Recommended Engine Size . . . . . .09 - 19
Recommended Radio. . . . . .3 channel
Flying Weight . . . . . 50 oz.
Wing Loading . . . . . .7½ oz./sq. ft.



PK-2

"A training airplane for would-be R/C flyers with aged reflexes and faint hearts." This is Bill Carter's introduction to his BUTTERFLY II in the R/C Modeler Magazine construction article.

BUTTERFLY II is truly a gentle trainer; so docile the average beginner will experience the thrill of success on his first flight—even without assistance! BUTTERFLY II is large and light, with a very slow cruising speed. She is exceptionally crash-resistant, but if she does have a mishap—she is fast and easy to repair.

BUTTERFLY II is not *just* a gentle trainer sedately cruising around at quarter throttle. She also has a sporting side to her nature!

At full throttle, the performance is astonishing. The rate of climb must approach 600 ft/min. Rough calculation and observation both indicate that the top speed exceeds 50 mph. She will do a very majestic slow roll across the field and gain altitude in the process.

EXHIB'AIR

FAIRCHILD F-27 1/12 SCALE



SEE PAGE 87 FOR THE ALL NEW MITSUBISHI MU-2L FROM EXHIB'AIR. A SUPER .20 SIZE FIBERGLASS TWIN.

Wing Span . . . 96″
Fuse Length . . . 78″
Height . . . 28″
Weight . . . 18 lbs.
Power . . . two .60s
Radio . . . 5-6 channel

INCLUDES

- **Precut plywood frames**
- **White gel-coated fiberglass nacelles, cone, cap**
- **Scale aluminum landing gear**
- **Two 36″x84″ detailed plans**
- **32-page booklet (including scale diagrams)**
- **3/32″ balsa skins**
- **All parts handcut, de-burred and sanded.**

This outstanding all balsa construction kit is manufactured by EXHIB'-AIR and is available exclusively from Tower Hobbies. The model is the ultimate in customized scale R/C and there is absolutely nothing else like it on the market. The workmanship is excellent, the wood selection outstanding, and the quality is the highest. Everything from the smallest pre-cut piece to the fantastically complete and totally comprehensive construction booklet will exceed the demands of the most descriminating modeler. Flight characteristics are stable, predictable, and realistic. A model for those who insist upon the finest.

EXH74000	EXHIB'AIR FAIRCHILD F-27	399.95	299.95

GOLDBERG

RADIO CONTROL MODELS THAT ARE GREAT TO FLY!

All Carl Goldberg Models Come With Full Size Plans, Illustrated step by step, and Folder on How to Set Up and Operate R/C Models.

THE FLYING FALCONS

More Falcons have been built and flown in the past 10 years than any other R/C. For values and features in a functional, rugged airplane, your best bet is a Falcon. Every design element engineered for simplicity and fast-building.

FEATURES:

- All Deluxe, with top quality fittings, Coil-sprung nose gear . . . formed main gear.
- Shaped and notched leading and trailing edges.
- Cleanly die-cut ribs, fuse sides, formers, etc.
- New simple "Symmet-TRU" wing construction.



SR. FALCON

The Standard Big Trainer. For 4 Channel Proportional. Span 69". For .35 to .60 Engines.

SEE THE NEXT TWO PAGES FOR THE FALCON 56 AND SKYLARK 56 MARK II.



SKYLANE 62

Tough, Roomy Cabin and Front End. For 2 to 4 Channel Proportional. Steerable Nose Gear. See-through cabin, with die-cut plywood cabin sides. Span 62". Weight 4½-5 Lbs. For .35 to .45 Engines.



Junior FALCON

The Small Trainer. For Single or 2 Channel, Pulse or Digital. Span 37". For .049 Engines.

JR. SKYLARK

For Single or 2 Channel. Pulse or Digital. Span 37" Weight 18 oz. For .049 Engines.





1/2A SKYLANE

For Single or 2 Channel, Pulse or Digital. Span 42". Weight 22 oz. For .049 to .10 Engines.



SHOESTRING

The Goodyear Racer with Enough Area and Stability so YOU Can Fly It! For 4 Channel Proportional. Span 54"; Area 540 sq. in.; Weight 4½-5 lbs. For .19-.40 Engines.

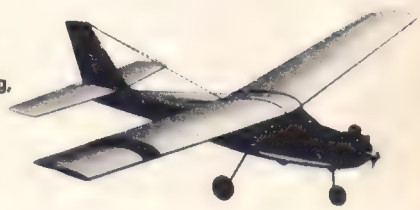
KIT G25



43"SPAN
29½" LENGTH
390 sq. in. AREA

RANGER 42

Takes Single to Small 4 Channel Proportional Radio, Molded Fuselage, One Piece Molded Wing, Stabilizer and Vertical Fin. Also Free Flight. Span 42", Weight 26 oz. For .049-.10 Engines.



THE ALL *NEW* CONTROL LINE

FLYING TIGER P-40 STUNTER

FOR .19 TO .35 ENGINES

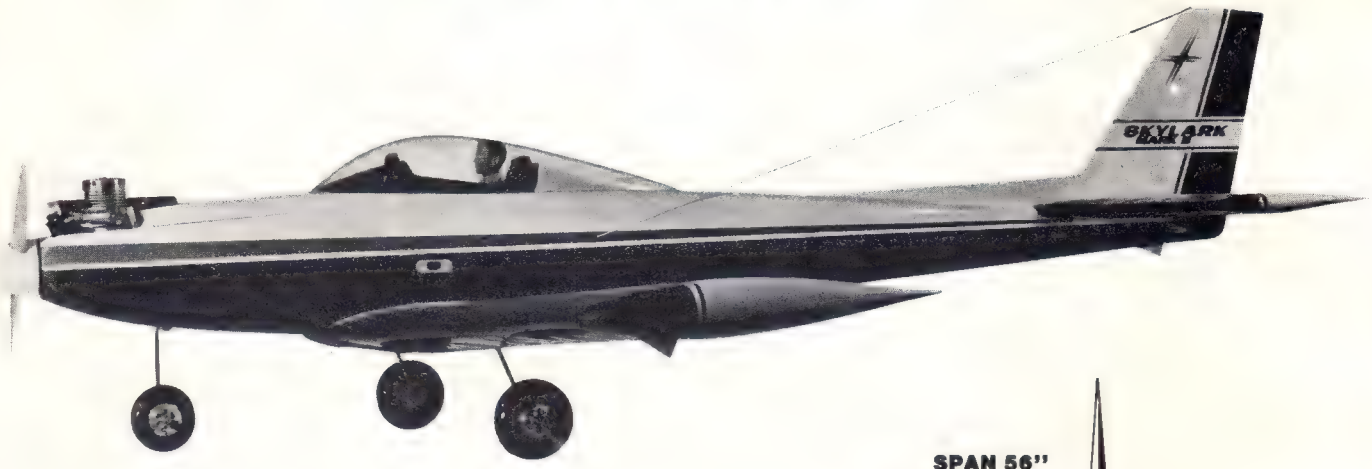
PLANS ALSO SHOW R/C VERSION, FOR 2-3 CHAN. RADIO, .15 - .19 ENGINES

GBG72001	GOLDBERG PRC-1 RANGER 42 ARF	24.95	19.95	33
GBG72015	GOLDBERG G15 FALCON 56 MKII	39.95	27.50	35
GBG72018	GOLDBERG G18 1/2 A JR. FALCON	13.95	11.50	33
GBG72021	GOLDBERG G21 SKYLARK 56 MKII	44.95	30.95	34
GBG72022	GOLDBERG G22 JUNIOR SKYLARK	14.95	12.25	33
GBG72023	GOLDBERG G23 1/2 A JR. SKYLANE	15.95	12.95	33
GBG72025	GOLDBERG G25 P-40	15.95	12.95	33
GBG73026	GOLDBERG G26 SHOESTRING 54	49.95	37.45	33
GBG73027	GOLDBERG G27 SKYLANE 62	59.95	41.95	33
GBG74016	GOLDBERG G16 SENIOR FALCON	59.95	41.95	33
GBG75015	GOLDBERG G15W WING FALC-SKYLRK	15.95	13.55	33
GBG75016	GOLDBERG G16W WING SR. FALCON	24.95	21.20	33
GBG75027	GOLDBERG G27W WING SKYLANE 62	24.95	21.20	33

GOLDBERG

Announcing the NEW

SKYLARK 56
MARK II



SPAN 56"
LENGTH 47½"
AREA 558" SQ. IN.
WEIGHT 4½ TO 5 LBS.
FOR .30 TO .40 ENGINES

With an eye for beauty, the Skylark Mark II has undergone extensive changes to not only simplify, but to improve its construction, strength and overall flight performance. If you want a sharp, fun to fly sport airplane with pattern capabilities, here's why the Skylark Mark II is the one for you!

NEW *Ailerons and complete aileron hardware. Can be easily built for 4-channel operation.*

NEW *Wider and longer front end to take larger engines and tanks.*

NEW *Heavy-duty landing gear and steerable nosegear.*

NEW *Strengthened and simplified fuselage construction.*

NEW *Redesigned stronger wing with new symetrical airfoil.*

NEW *Greatly improved plans with large well-organized building steps to guide the modeler and answer his questions.*

KIT G 21

GOLDBERG

FALCON 56 MARK II



SPAN 56"
LENGTH 47½"
AREA 558" SQ. IN.
WEIGHT 3¾ TO 4¾ LBS.
FOR .19 TO .40 ENGINES

More people have successfully learned to fly RC on the Falcon 56 than any other trainer in history. Now the MARK II introduces many new features, making the all-time favorite even better! If you're thinking of getting into the great sport of Radio Control Modeling, here's why the MARK II is the one for you!

NEW *Ailerons and complete aileron hardware. Can be easily built for either 3-channel or 4-channel operation.*

NEW *Wider and longer front end to take larger engines and tanks.*

NEW *Heavy-duty landing gear and steerable nosegear.*

NEW *Strengthened and simplified fuselage construction.*

NEW *Stronger wing - now takes more than 10 G's!*

NEW *Greatly improved plans, twice the area, large, well organized building steps to guide the novice and answer his questions.*

CG

SEE PAGE 33 FOR STOCK NUMBERS AND PRICES FOR FALCON 56 & SKYLARK 56.



RHETT MILLER

At the age of 11, Rhett Miller saw a model he thought was flying on extremely long lines. It turned out to be an RC model performing its fascinating maneuvers! So Rhett, like many others, started RC with a Falcon 56. With the help of his parents and flying friends – including the great Jim Kirkland – he progressed at amazing speed. Soon he was into precision aerobatics. Finally, at the age of 15, he did the unbelievable. At the 1973 National Championships, he beat the toughest competition in the U.S., and took 1st place! Congratulations, Rhett, on an extraordinary achievement!

GMC MODELS

CORSAIR



The Japanese called her "Whistling Death." Allies called her "Devastating." You will call her "Remarkable"!

The F4U Chance Vought Corsair, introduced into the Pacific Theater in 1943, in production until 1952 (12,681 were manufactured). Proclaimed one of the best fighters of WWII, the Corsair had over 2,000 victories by 1945. The F4U was again in action over Korea. It was nearly the last piston engine fighter on active duty, not retired until 1965.

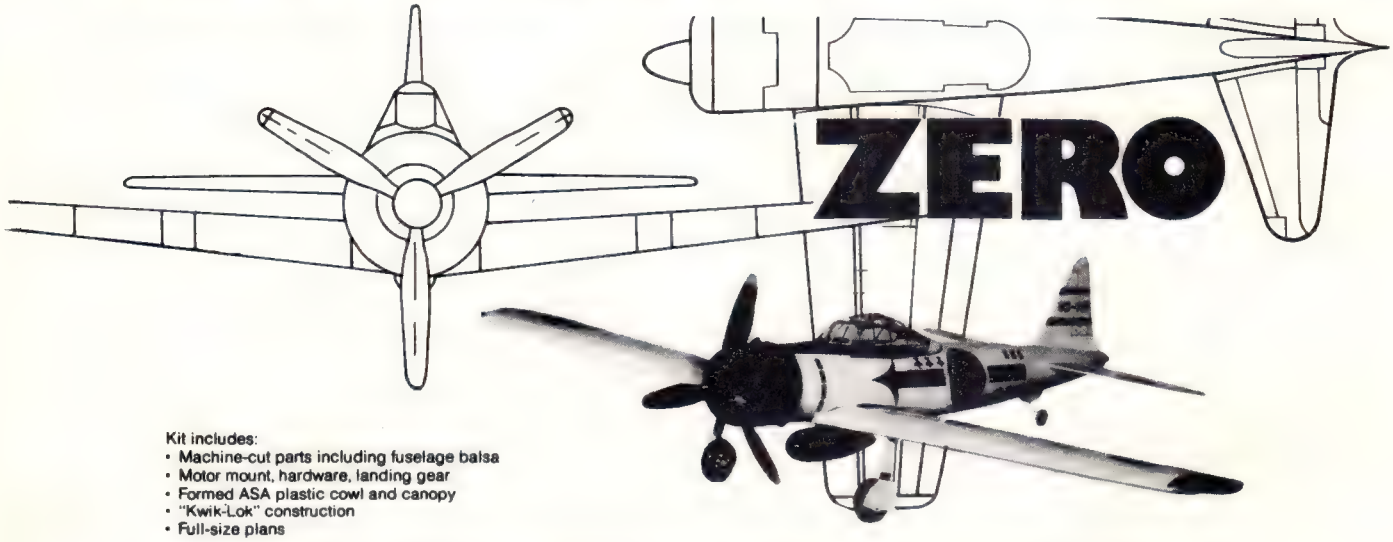
Kit includes:
- Machine-cut parts including fuselage balsa
- Motor mount, hardware, landing gear
- Formed ASA plastic cowl and canopy
- "Kwik-Lok" construction
- Full-size plans

Specifications	
ENGINE	.COX TD .049– .051
RADIO	.Two channel
WING	Foam, no sheeting required
FUSELAGE	Plywood & AA Grade balsa
SPAN	.34" Area 190 sq. in.
WEIGHT	20-25 oz.

½-A-STAND OFF SCALE

SUPER SCALE • PATTERN PERFORMANCE • QUICK CONSTRUCTION

ZERO



Kit includes:
- Machine-cut parts including fuselage balsa
- Motor mount, hardware, landing gear
- Formed ASA plastic cowl and canopy
- "Kwik-Lok" construction
- Full-size plans

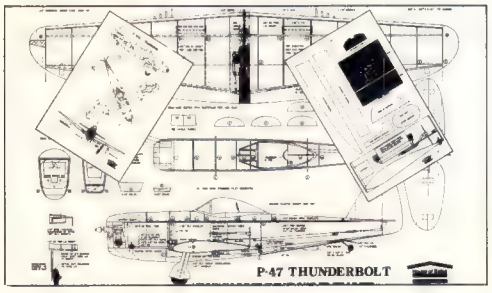
The Mitsubishi A6M3 Zero, one of the most famous of all WWII fighters, was the backbone of the Japanese Naval Airforce. It began its career in China against the "Flying Tigers," flew as bomber escort at Pearl Harbor, fought in every major Navy engagement of the Pacific Theater and proudly ended its career as "Kamikaze" in defense of the Home Islands.

Specifications	
ENGINE	.COX TD .049-.051
RADIO	.2 Channel
WING	Foam, no sheeting required
FUSELAGE	Plywood & AA Grade balsa
SPAN	.36" Area 200 sq. in.
WEIGHT	.20-25 oz. (No. 106)

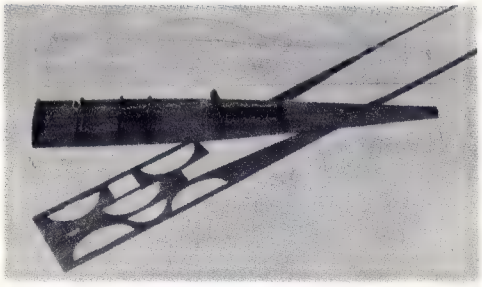
GMC72100	GMC MODELS 1/2 A F4U CORSAIR	31.95	24.95
GMC72101	GMC MODELS 1/2 A ZERO	31.95	24.95

HOUSE OF BALSA

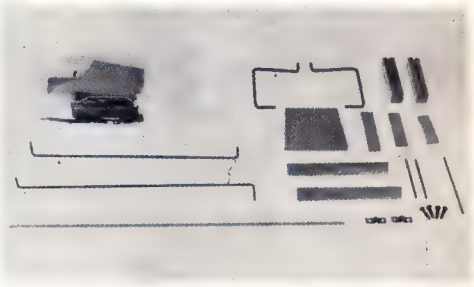
Take a close look at ½A Scale.



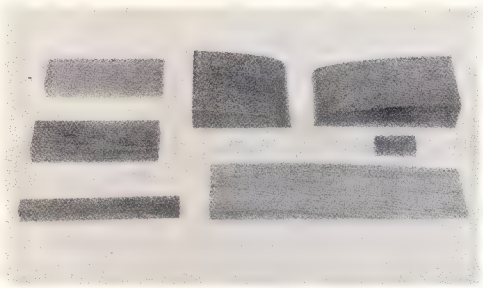
Full size plans, rolled for convenience 3-views, Templates and Decals.



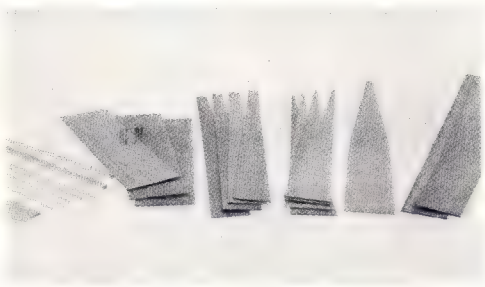
Lightweight formed fuselage top and balsa substructure



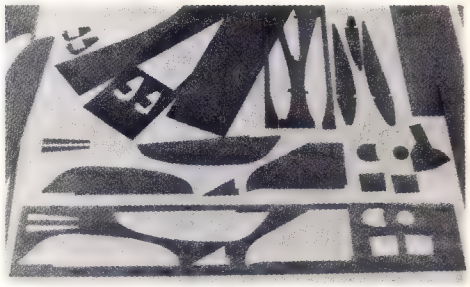
Pre-bagged hardware and preformed wire parts.



Balsa blocks, cut to size and pre-shaped.



Machine cut fuselage sides, wing sheeting and sticks.



Die-cut parts. So clean cut, they actually fall out.



(Typical construction sequence)

All of our kits have complete detailed instr. with over 100 construction photos, including finishing and radio installation.

and how to build it.

House of Balsa®

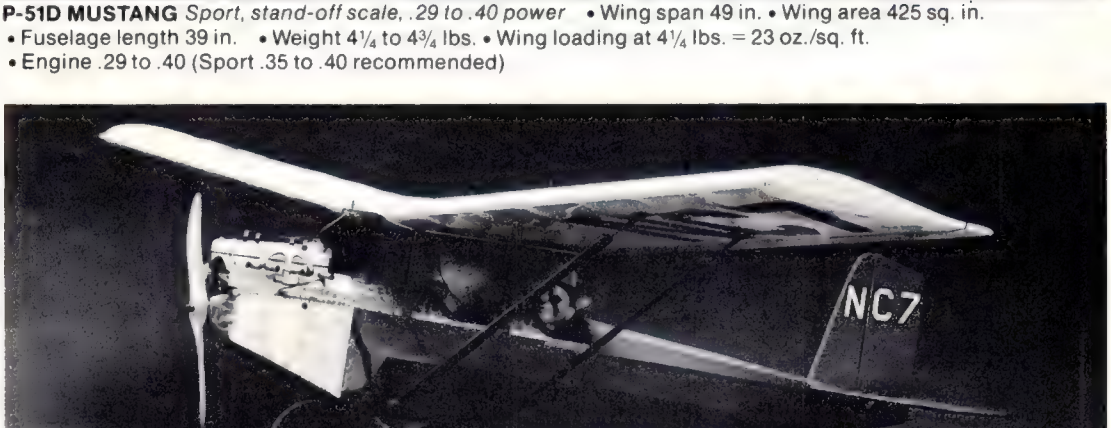
SEE NEXT TWO PAGES FOR HOUSE OF BALSA KIT LINE

HOUSE OF BALSA

STAND-OFF SCALE .29 TO .40



P-51D MUSTANG *Sport, stand-off scale, .29 to .40 power* • Wing span 49 in. • Wing area 425 sq. in.
• Fuselage length 39 in. • Weight 4¼ to 4¾ lbs. • Wing loading at 4¼ lbs. = 23 oz./sq. ft.
• Engine .29 to .40 (Sport .35 to .40 recommended)



PIETENPOL (PETE 'N' PAUL) *A sport and stand-off scale trainer* • Wing span 65 in., area 715 sq. in.
• Flying weight 4.5 to 5.5 lbs. • Wing loading at 4.5 lbs. = 14.5 oz./sq.ft.; at 5.5 lbs. = 17.7 oz./sq.ft.
• Engine .29 to .40 cu. in. • 2-3 Channel

.29 to .40
CHIPMUNK
AVAILABLE SOON

House of Balsa ®

The home of ½A scale.

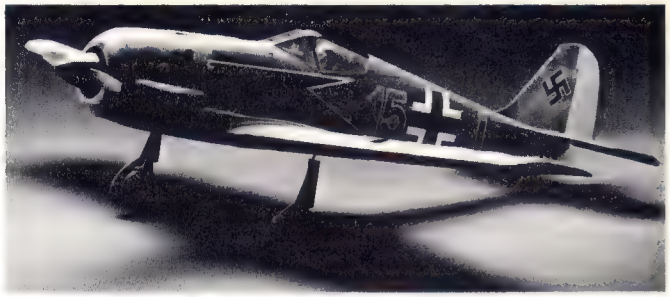
HOU72003	HOUSE OF BALSA PIETENPOL	49.95	39.95	38
HOU72004	HOUSE OF BALSA 1/2 A P-51 MUST	29.95	24.75	39
HOU72005	HOUSE OF BALSA 1/2 A ME-109	29.95	24.75	39
HOU72006	HOUSE OF BALSA 1/2 A P-47	29.95	24.75	39
HOU72007	HOUSE OF BALSA 1/2 A CHIPMUNK	29.95	24.75	39
HOU72008	HOUSE OF BALSA 1/2 A P-39	29.95	24.75	39
HOU72009	HOUSE OF BALSA 1/2 A BONANZA	29.95	24.75	39
HOU72010	HOUSE OF BALSA 1/2 A FW-190A	29.95	24.75	39
HOU72011	HOUSE OF BALSA 1/2 A P-38	Price unavailable at press time		39
HOU72012	HOUSE OF BALSA 1/2 A P-40	Price unavailable at press time		39
HOU72015	HOUSE OF BALSA 1/2 A PETE K-15	22.95	18.95	39
HOU73000	HOUSE OF BALSA P-51D (29-40)	54.95	43.95	38
HOU73001	HOUSE OF BALSA CHIPMUNK 29-40	Price unavailable at press time		38

HOUSE OF BALSA

1/2-A, SPORT, STAND-OFF SCALE, FOR 2 CHANNEL RADIO



P-39 AIRACOBRA • Span 36 in. • Area 216 sq. in. • Length 28.5 in.
• Weight 22-28 oz. • Engine TD .049
• Wing loading 14.6-18.6 oz./sq. ft.



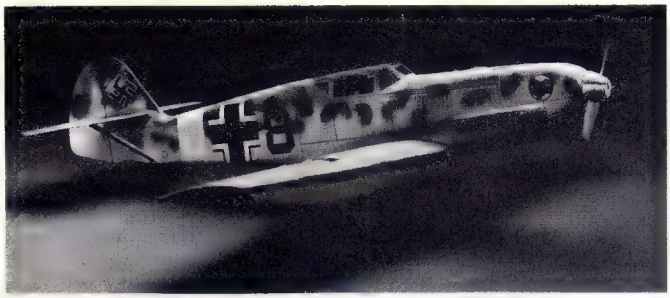
FOCKE-WULF FW 190-A3 • Span 36 in. • Area 216 sq. in.
• Length 28.5 in. • Weight 22-28 oz. • Engine TD .049
• Wing loading 14.6-18.6 oz./sq. ft.



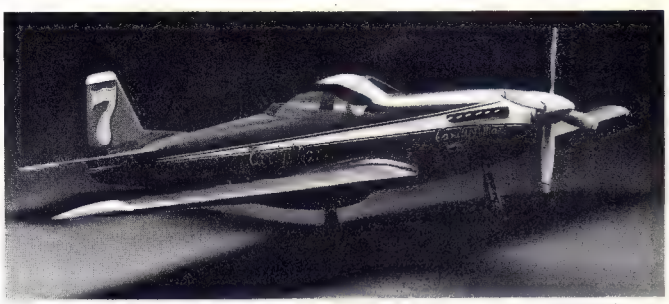
PIETENPOL SKY SCOUT (½-A *'PETE'*) • Span 42 in.
• Area 284 sq. in. • Length 26 in. • Weight 22-27 oz.
• Engine QRC .049 • Wing loading 11-14 oz./sq. ft.



P-47 THUNDERBOLT • Span 36 in. • Area 216 sq. in.
• Length 28.5 in. • Weight 22-28 oz. • Engine TD .049
• Wing loading 14.6-18.6 oz./sq. ft.



ME-109E • Span 36 in. • Area 216 sq. in. • Length 28.5 in.
• Weight 22-28 oz. • Engine TD .049
• Wing loading 14.6-18.6 oz./sq. ft.



P-51D MUSTANG • Span 36 in. • Area 216 sq. in. • Length 28.5 in.
• Weight 22-28 oz. • Engine TD .049
• Wing loading 14.6-18.6 oz./sq. ft.



CHIPMUNK • Span 36 in. • Area 216 sq. in. • Length 28.5 in.
• Weight 22-28 oz. • Engine TD .049
• Wing loading 14.6-18.6 oz./sq. ft.



BEECHCRAFT BONANZA • Span 36 in. • Area 216 sq. in.
• Length 28.5 in. • Weight 22-28 oz. • Engine TD .049
• Wing loading 14.6-18.6 oz./sq. ft.

P-40 WARHAWK
AVAILABLE SOON

P-38 LIGHTNING
AVAILABLE SOON

GEE BEE

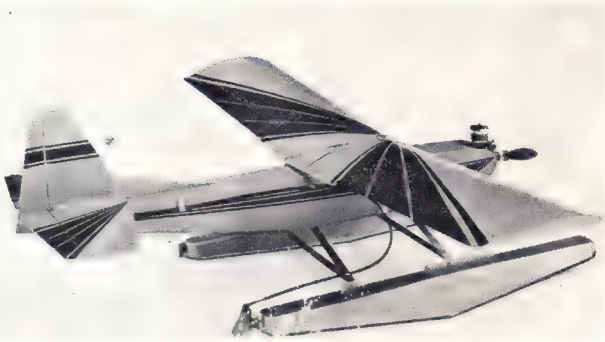
'Mallard'



The greatest little flying boat of them all - updated with a new rudder and tip floats to make it docile for the novice and a ball for the old-timer - amphibious - finished hull.

Span: 50" area 437
Power: 25 to 35 3 CH.

SEA HAWK



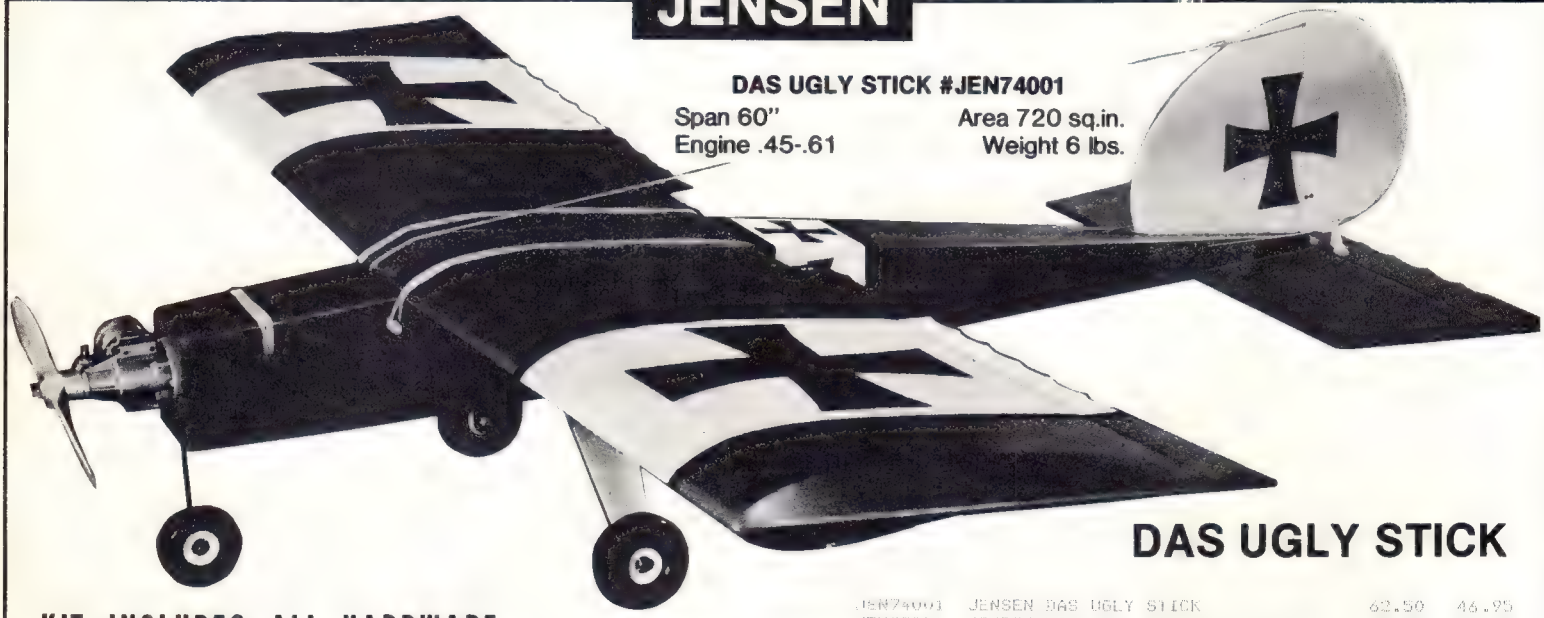
The ideal model for the twin float flyer - completely finished floats in kit - model builds fast and is a great flyer - may easily be converted for land flying.

Span: 50" area 437
Power: 20 to 40 4 CH.

GBE73010	GEE BEE RC-01 MALLARD SEAPLANE	46.95	37.50
GBE73030	GEE BEE RC-03 SEA HAWK	49.95	39.95

See Page 234 for Gee Bee floats that are adaptable to most models — two sizes.

JENSEN



DAS UGLY STICK #JEN74001

Span 60" Area 720 sq.in.
Engine .45-.61 Weight 6 lbs.

DAS UGLY STICK

JEN74001	JENSEN DAS UGLY STICK	62.50	46.95
JEN75001	JENSEN WING KIT DAS UGLY STICK	26.00	23.40
JEN76001	JENSEN FUSE KIT DAS UGLY STICK	28.75	25.85

KIT INCLUDES ALL HARDWARE

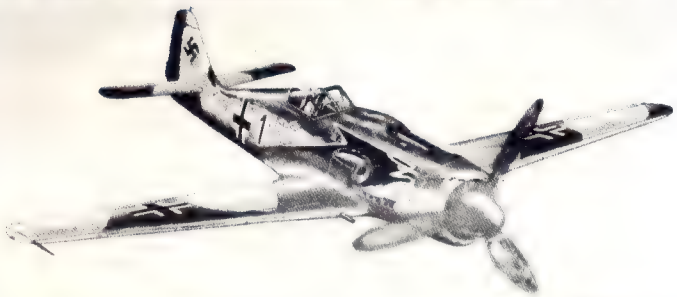
- HEAVY DURAL FORMED MAIN GEAR
- NOSE GEAR
- STEERING ARM
- PUSHRODS & CLEVISES
- CONTROL HORNS
- BELLCRANKS
- NYLON BEARING BLOCKS
- BRASS & PLASTIC TUBING
- BOLTS, NUTS ETC.

The Jensen Das Ugly Stick is considered by many to be the finest R/C Trainer ever made. It is ideal for the beginner or the experienced flier. This all balsa construction kit is very quick and easy to build. Quality of machine cut wood and sanded parts is excellent, and the fit is unusually accurate. The kit is very complete, including heavy dural formed main gear, nose gear, steering arm, pushrods, clevises, horns, bellcranks, etc.

WING AND FUSE KIT AVAILABLE

JEMCO

JEMCO FOCK-WULF Fw 190D-9
.29 - .40 Stand Off Scale R/C — Designed For The Sport Flyer



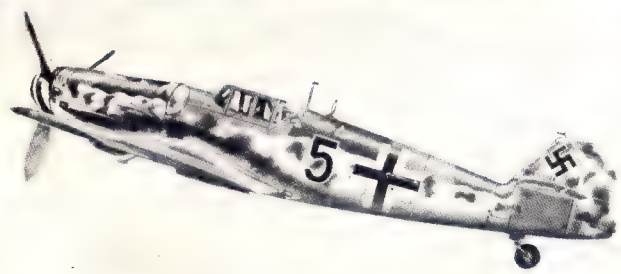
The "Long Nose" version of the famous Fw-190A was one of the fastest propeller driven Luftwaffe aircraft of WWII. Developed late in the war, less than 700 were produced. Detailed three views of one prototype and two production versions are included along with color data. Flap and retract prints and instructions available.

Span 50 in. Area 450 sq.in. .29 - .40 Engine 4 - 4½ lbs

● MOLDED CANOPY, EXHAUST, GUN BLISTERS & COWL ● ALL DIE CUT FUSELAGE PARTS ● FOAM CORE WINGS & BALSA SHEETING ● WRITTEN INSTRUCTIONS ● CUSTOM DECALS ● COMPLETE HARDWARE ●

Featuring New Self Aligning, Self Jigging, JEM LOC Super Fast Fuselage Construction.

JEMCO Messerschmitt ME 109G-2
.29 - .40 Stand Off Scale R/C — Designed For The Sport Flyer



The Me-109 was the most produced German fighter of WWII. It's distinctive appearance makes it a popular choice for the competent Sport Flyer. A sheet showing camouflage and markings for seven different schemes is included. Builds fast and flies great. Flap and retract prints and instructions available.

● MOLDED CANOPY ● EXHAUST & SCOOPS ● COMPLETE HARDWARE ● FOAM CORE WING & SHEETING ● DECAL SHEET WRITTEN INSTRUCTIONS ●

Span 50 in. Area 450 sq.in. .29 - .40 Engine 4 - 4½lbs.

JEMCO North American P-51 *MUSTANG*
.29 - .40 Stand Off Scale R/C — Designed For The Sport Flyer

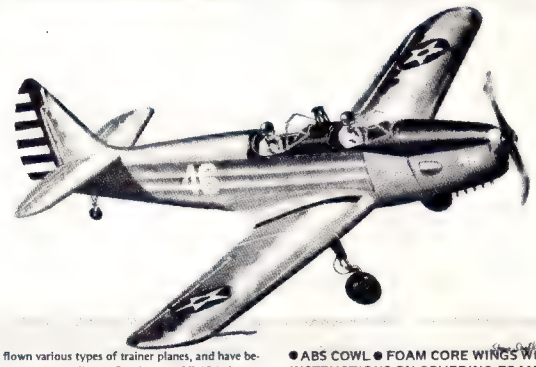


The ultimate in Standoff Scale, and a beautiful selection for the competent Sport Flyer. Included is a super decal sheet that allows you to choose from five different military schemes and the Miss America scheme. Flies great and looks great on the flight line. Flap and retract prints and instructions available.

● MOLDED CANOPY AND EXHAUST ● FOAM CORE WING & SHEETING ● LARGE DECAL SHEET ● COMPLETE HARDWARE ● WRITTEN INSTRUCTIONS ●

Span 50 in. Area 450 sq.in. .29 - .40 Engine 4 - 4½ lbs.

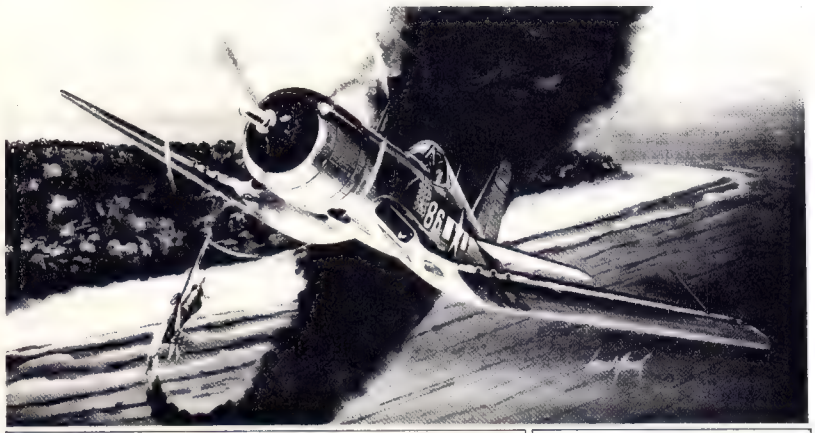
JEMCO *Fairchild PT 19 Primary Trainer*
.29 - .40 Stand Off Scale R/C — Designed For The Sport Flyer

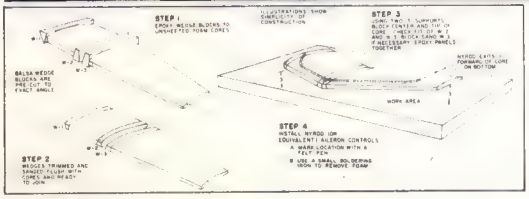


If you have flown various types of trainer planes, and have become comfortable in your ability to fly, then our PT-19 is for you. This is a realistic looking plane that takes off and lands easily!

Span 50 in. Area 450 sq. in. .20 - .40 Engine 3½- 4 lbs.

● ABS COWL ● FOAM CORE WINGS WITH COMPLETE INSTRUCTIONS ON COVERING FOAM CORES ● BEAUTIFUL DECAL SET ● COMPLETE HARDWARE ● WRITTEN INSTRUCTIONS ●

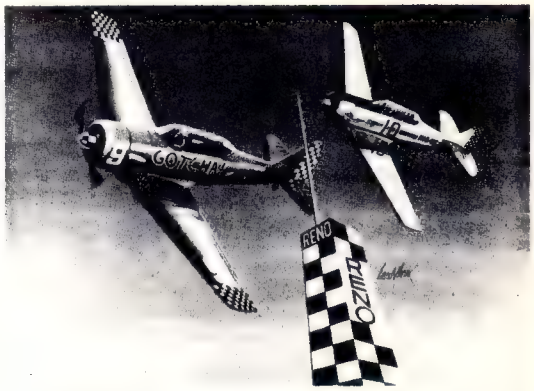




Chance-Vought F4U-1A "Corsair" by JEMCO

● FEATURING "JEM LOC" FUSELAGE CONSTRUCTION	.40 - .60 engines
● THREE VIEWS & COLOR NOTES	54" span
● CUSTOM DECAL SHEET	556 sq.in. wing area
● SPORT SCALE FLIGHT TRAINING MANUAL	5 - 6 lbs.
	4 - 6 channel
	All balsa construction

START A T-6 RACE . .



.35-.46 engine — 55" span — 480"² wing area — 5-5½ lbs. —

FEATURES
- JEM-LOC all-balsa fuse construction (built-in servo tray and die-cut planking). Builds right in your hands!
- Kit assembly time two weeks for the average modeler.
- Foam core wing (sheeting supplied) speeds construction.
- Finished model accurately reflects EXACT-SCALE appearance.

JEM73101	JEMCO FAIRCHILD PT-19	54.50	48.95	41
JEM73102	JEMCO P-51 MUSTANG	58.50	52.65	41
JEM73103	JEMCO ME-109	54.50	48.95	41
JEM73104	JEMCO FOCKE WULFE FW-190D-9	58.50	52.65	41
JEM73105	JEMCO AT-6 TEXAN	58.50	52.65	41
JEM74105	JEMCO F4U-1A CORSAIR	68.50	61.65	41
JEM74106	JEMCO F6F HELLCAT	68.50	61.65	41

KIT INCLUDES
Pre-formed plastic wing fairing, canopy, cowl, scoops, decals and 3-views, plus "Sport Scale Flight Training Manual."

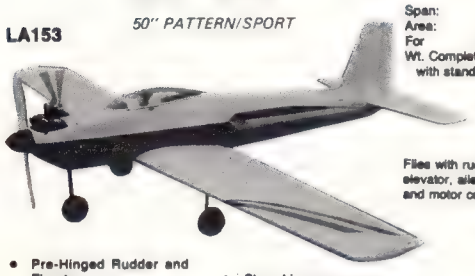
LANIER

Lanier® Ready-to-Fly* Models

...every one designed and flown by the experts!

SCAMP

LA153 — 50" PATTERN/SPORT



Span: 50 in.
Area: 350 sq. in.
For .25 or .40 eng.
Wt. Complete: 3 lb. 10 oz. with standard 4 ch. radio

Flies with rudder elevator, aileron and motor control.

- Pre-Hinged Rudder and Elevator.
- Complete Push Set included (not wheels)
- Bolt or Rubber Band wing hold down
- Steerable nosegear
- Ample fuselage room for 4 channel radio
- Plywood reinforced aft fuselage.

Transit

3 Channel Trainer

LA 108



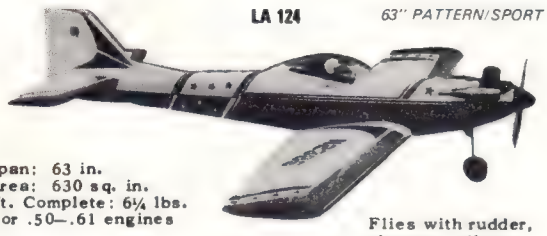
*Wing, stab & fin covered with "tough-skin" *

Span: 65 in.
Area: 520 sq. in.
For .35 or .45 engines

Flies with motor, rudder, elevator control. (No ailerons).

Jester II

LA 124 — 63" PATTERN/SPORT



Span: 63 in.
Area: 630 sq. in.
Wt. Complete: 6¼ lbs.
For .50—.61 engines

Flies with rudder, elevator, aileron and motor control.

CAPRICE

designed by George Hill

KIT LA 116 — 63" PATTERN/SPORT



Span: 63 in.
Area: 630 sq. in.
Wt. Complete: 6 1/4 lbs.
For .50-.61 engines

Flies with rudder, elevator, aileron and motor control

HARD SKIN WING AND STAB.

FLIES COMPLETE AMA & FAI PATTERNS

Assemble in 5 to 12 hours.

NEW! features

Complete hardware. All lanier kits now contain a complete set of hardware including a steering arm, push rod clevis, hub caps, control horns, aileron hardware (where applicable) and other items needed except the fuel tank and wheels.

Faster assembly. We Pre-Hinge® ailerons and elevators on all models, rudders on most.

Better Value. Prices of Lanier models have gone up, but they haven't skyrocketed like balsa kits. Even if you don't count your labor, a Lanier kit costs less.

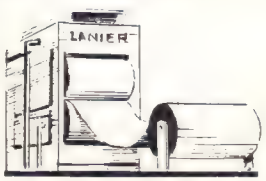
PLUS THESE REGULAR FEATURES

- Lanier planes fly better because automatic machines mold every wing accurately and true. Wings and stabilizers are molded from styrofoam and precovered with special hard skin*. Elevator, rudder, and ailerons are balsa covered with Air-O-Skin.
- Lanier planes fly better because every fuselage is vacuum formed from Air-O-Sheet & assembled with specially made tools to make sure it's straight. Air-O-Sheet is tough, pliable material that will not shatter like fiberglass and other plastics. Fuselages are complete with motor mounts, engine cutouts and dorsal fin and are available in several colors.
- Models have nose and main landing gears preformed and aileron linkage ready for installation.
- Models are fuel resistant.
- Interchangeable spare parts are available.
- All kits come with step-by-step instructions and Air-O-Cement.

LANIER PUTS IT ALL TOGETHER... UNDER ONE ROOF!

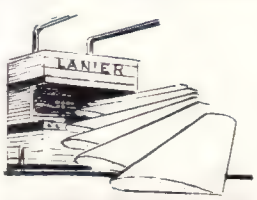


Lanier buys custom made plastic raw material from a large established supplier. Our special specifications assure the best formulation for R/C use. We do not think off the shelf materials are good enough.



Our sheet plastic quality is determined by the exacting extrusion conditions we maintain.

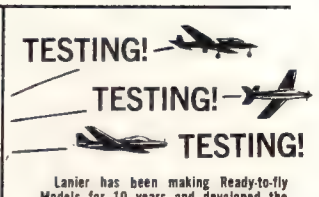
Lanier is the only Ready-to-fly manufacturer who can control the quality of its sheet stock which means you get the best!



We mold our own wings too, so that we can control the weight and quality needed to produce the best in R/C Models. All wings and tails are molded (not cut from a block) for accuracy.



It took a long time to develop—but our hard skin really stays on—at home in the basement and out in the sun too! We extrude our own sheet plastic and use a special formula adhesive.



Lanier has been making Ready-to-fly Models for 10 years and developed the first successful model of this type.

We still "test" before we sell and wish the competition would do the same, sometimes we wonder.

Don't try it unless you know the manufacturer tests—you may not like it!

LANIER

***FOUR EASY STEPS TO R/C FLYING 1. Glue pre-cut wing halves together. 2. Mount tail surfaces. 3. Attach control surfaces. 4. Install engine and equipment (not included). NOTHING to build, cover or paint.**

Comet 35 *Smaller Size Lanier Model*

50" SPORT/TRAINER

LA 154

Span: 50 in.
Area: 350 sq. in.
For .19-.35 engines



Flies with rudder, elevator, aileron and motor control.

- PRE-HINGED RUDDER & ELEVATOR
- COMPLETE PUSH SET INCLUDED (NOT WHEELS)
- BOLT OR RUBBER BAND WIND HOLD DOWN
- STEERABLE NOSE GEAR
- AMPLE FUSELAGE ROOM FOR 4 CHANNEL RADIO
- PLYWOOD REINFORCED AFT FUSELAGE

Comet II

63" SPORT/TRAINER

LA 105

Flies with rudder, elevator, aileron & motor control.



Span: 63 in.
Area: 630 sq. in.
For .50 or .61 engines
Wt. complete: 6 lb. 4 oz.

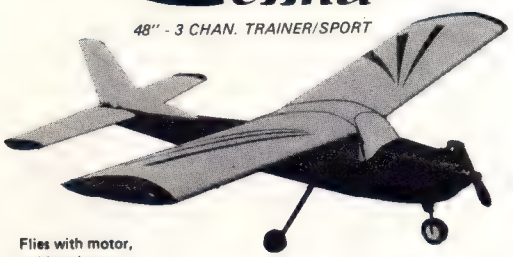
Features plywood aft fuselage reinforcing

DESIGNED BY LEN PURDY

Cessna

LA 119

48" - 3 CHAN. TRAINER/SPORT



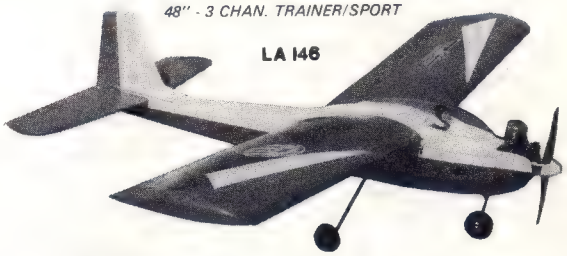
Flies with motor, rudder, elevator control. (No ailerons).

Span: 48 in.
Area: 480 sq. in.
For .15 or .19 engines

Pinto

48" - 3 CHAN. TRAINER/SPORT

LA 146



Flies with rudder, elevator and motor control.

Span: 48 in.
Area: 480 sq. in.
Wt. complete: 3 lb. 8 oz.
For .23 or .35 engines

LEN SEZ! HINTS & SUGGESTIONS

Quik fuselage repairs are easy — just follow the following steps.

1. Clean the damaged area of the fuselage [not wings] with alcohol and allow to dry.
2. Cut a piece of Quik 1/4" larger on all sides than the repair area. Quik it a cloth material-specially treated.
3. Dip the Quik into air-o-cement [or MEK] — immediately apply to fuselage - smooth out with finger and allow to dry and harden.
4. Lightly sand and then paint with scrap plastic dissolved in air-o-cement.

This method handles compound curves with ease.

Flutter at high speed?

It can be a problem if you allow any "slop" anywhere — like in push rods and servos.

1. Do not use ANY kind of plastic push rods.
2. Use a center bearing of some sort on all divided elevator models.
3. Use double push rods — one for each elevator half.
4. Keep the engine tight.
5. Do not use blind nuts for engine mounting.

Wing and stab leading edge cracks can occur as a result of FUEL attack or WINTER STORAGE at low humidity. It is usually not a problem — we have wings 10 years old in perfect condition here at the factory.

As a precaution, a light coat of wax will be a good precaution. The perfect preventative is to cover the leading edge with our air-o-skin.

Put the final touches to your Lanier model with colorful trim. See page 259 for Lanier trim available in convenient assortment packages.

TRIM . . .

- Trim is the modern, easy way to add individuality to your model. Just cut one of the two basic shapes (the strip or the taper), peel off the backing, press Trim on . . . it stays on until you want to take it off. You can apply Trim to almost any doped, painted, plastic, wood or silk surface.

Every package of Trim contains 6 sheets of 2"x15" Trim in assorted colors—white, blue, red, yellow and black.

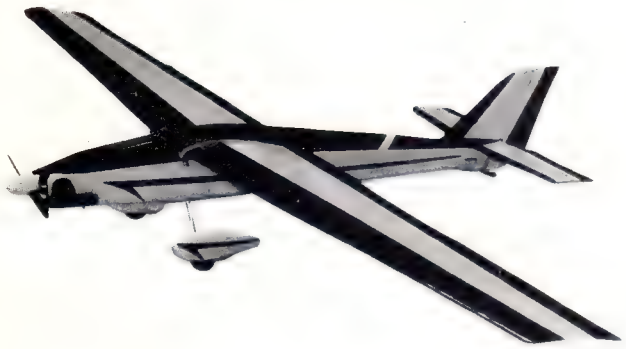
No wheels? Many new pilots find it easier to master the art of landing if the wheels are left off on the initial attempts. Landing in short grass without the wheels makes the big problem less hazardous.

How long to assemble? This question is often asked and of course the abilities of the pilot is a major factor. Usually 5-12 hours will completely assemble a model and ready it for flight.

LAN72119	LANIER LA119 CESSNA	46.50	34.75	43
LAN72153	LANIER LA153 SCAMP	52.50	39.25	42
LAN73108	LANIER LA108 TRANSIT	44.50	33.50	42
LAN73146	LANIER LA146 PINTO	46.50	34.75	43
LAN73151	LANIER LA154 COMET 35	52.50	39.25	43
LAN74105	LANIER LA105 COMET II	58.50	43.95	43
LAN74116	LANIER LA116 CAPRICE	73.50	55.10	42
LAN74123	LANIER LA124 JESTER II	73.50	55.10	42

MARK'S MODELS

Bushwacker

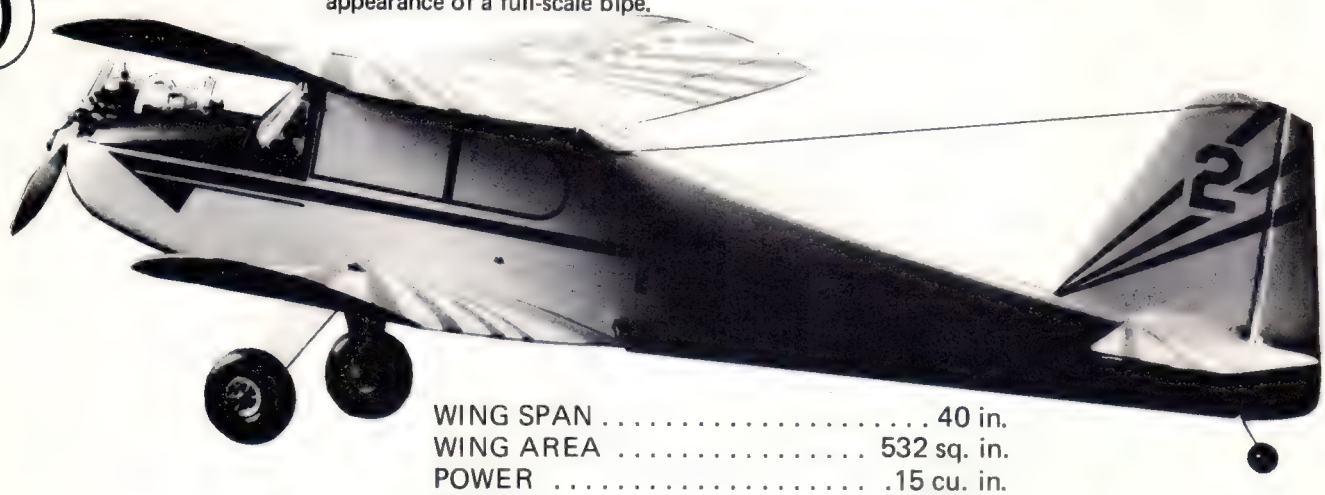


A transition trainer for the modeler who is tired of slow, boxy trainers, or who is proficient with sailplanes and wants to try power. Ailerons provide the extra control that make R/C power flying more fun. Bushwacker is capable of performing the full stunt pattern, yet she will "turn on a dime" and land like a feather. If there is no runway you can remove the landing gear in 15 seconds and hand launch the plane. The kit is available in two versions – with and without accessories. Both versions include: 52-page instruction book, bell cranks, control horns, formed landing gear, hinges, mounting bolts, blind nuts, engine mount, die-cut muffler. The deluxe kit also includes: fuel tank, wheels, spinner, push rods and clevis.

Wing Span .....68.75 in.
Wing Area ..... 555 sq. in.
Power .....15 to .19 cu. in.
Weight .....3 lbs. (.15 cu. in. dry)

SUNNY

A 3-channel R/C trainer that is easy to build and fly yet retains the appearance of a full-scale bipe.



WING SPAN ..... 40 in.
WING AREA ..... 532 sq. in.
POWER ..... .15 cu. in.
WEIGHT ..... 3½ lbs.

A FRIENDLY PLANE THAT LETS YOU ENTER THE WORLD OF BIPLANES WITHOUT HAVING TO SPEND A FORTUNE FOR A BIG .60 POWERED PLANE OR PUT UP WITH FOAM WINGS.

- FULL SIZE PLANS
- PHOTO PAGE TO COMPLEMENT THE WRITTEN INSTRUCTIONS
- COMPLETE INSTRUCTIONS
- MACHINED & DIE CUT PARTS
- FORMED ALUMINUM LANDING GEAR
- HARDWARE
- ALL BALSA CONSTRUCTION

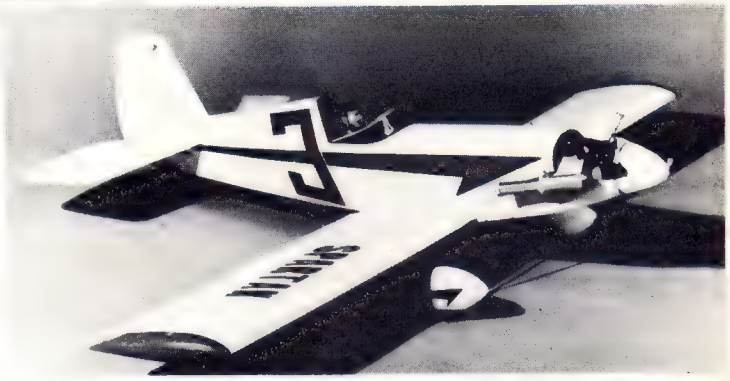
MODEL AIRPLANE KITS FOR THE MODELER

57 years of combined building and flying experience have gone into the design of each airplane in the Mark's Models line. Our active participation in both sport and competition flying assures the modeler he is purchasing a proven practical airplane.

MAR72000	MARKS MODELS SUNNY BIPE	32.95	24.25
MAR72004	MARKS MODEL BUSHWACKER W/ACCES	52.95	35.95

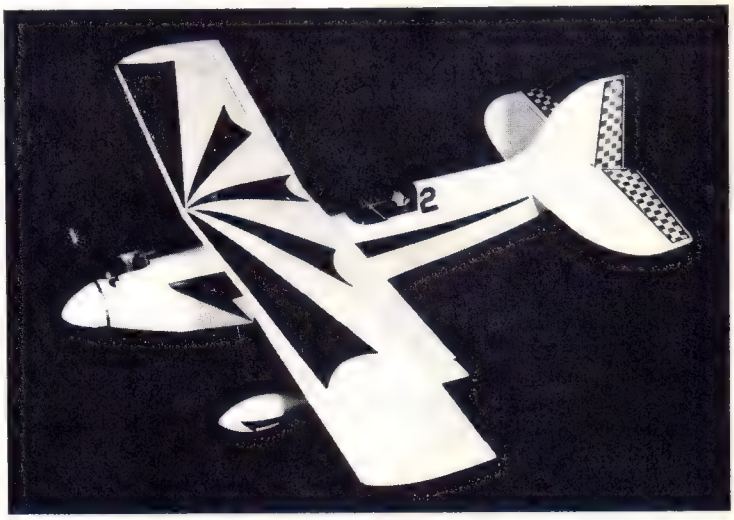
MASTER KIT





SPARTAN

Engine .35-.45 Span 56" 4 channels
This all balsa low wing aileron trainer features machine cut and sanded balsa parts, hardware package, and full plans and instructions.



STINGER II

Engine .35-.45 Span 38" Weight 4½-5½ lbs.
This all balsa kit comes with complete hardware, preformed landing gear, full size plans, and both wings fasten with nylon bolts. Easy construction.



PEPPERMINT PATTIE

Engine .15-.20 3-4 Channels
This all balsa high performance ship is designed for the experienced sport flyer. Features full sheeting, diecutting, hardware and full instructions.

HIPERBIPE

Engine .40-.45 Span 42" Weight 4-5 lbs.
This all balsa and ply kit is a fully aerobatic stand off scale bipe. Features include machine cut and sanded balsa, hardwood package, rolled full size plans, full instructions and photos. Recommended muffler is Semco Pitts Junior (see page 224).

MAS72000	MASTER-KIT PEPPERMINT PATTIE	42.95	33.95
MAS73000	MASTER-KIT STINGER-II BIPLANE	64.95	48.95
MAS73100	MASTER-KIT HIPERBIPE	64.95	48.95
MAS73200	MASTER-KIT SPARTAN	59.95	44.95

M.E.N.

MEN TRAINER "40"

For the second plane in your R/C flying program, Model Engineering of Norwalk has designed and developed the MEN intermediate Trainer "40".

The MEN four channel aileron trainer can be slowed to a fast walk for landing, yet at flying speed it is capable of flying most of the AMA pattern.

Model Engineering of Norwalk's "THRU-CUT" die cutting combined with "TRI-SQUARE-LOC" construction in lite ply, balsa, and spruce make construction fast and simple.

TRI-SQUARE-LOC enables us to bring to you the best in lite plywood construction. This method of squaring, straightening, and holding parts in relation to one another revolutionizes construction in lite plywood.

The inherent strength of lite plywood construction provides durability and lasting performance.

The MEN INTERMEDIATE TRAINER "40" is designed for four channel radio control operation with .35 to .45 model engines. The 52 inch wing span combined with 4½ pound flying weight gives a wing loading of 20 ounces per square foot.

The kit features THRU-CUT die cutting, quality materials, rolled plans, building instructions, complete hardware package, pre-shaped wing leading edge in spruce, die cut spars in lite plywood, and pre-bent landing gear wire. Building time for the MEN INTERMEDIATE TRAINER "40" is 12-25 hours.

M.E.N.
Model Engineering of Norwalk



PIPER CUB J3

Looking for a trainer that looks and flies like an authentic plane? Try Model Engineering of Norwalk's Piper Cub J3, a realistic rendition of a popular airplane that has a speed range of 8 to 40 M.P.H.

The MEN'S wing design gives realistic slow flight and excellent stability. Model Engineering of Norwalk's "THRU-CUT" die cutting, combined with TRI-SQUARE-LOC assembly in lite plywood, balsa and spruce, make construction simple enough for the beginner. The inherent strength of our lite ply construction provides durability and lasting performance. You will be spending more time on the flying field and less at the repair bench.

TRI-SQUARE-LOC enables us to bring to you the best in lite plywood construction. This method of squaring, straightening, and holding parts in relation to one another revolutionizes construction in lite plywood.

The J3 is designed for three channel radio control operation with a .29 to .35 model engine. The 72 inch wing span combined with approximately 4 pound flying weight gives a wing loading of 14 oz. per square foot.

The J3 kit features quality materials, rolled plans, building instructions, complete hardware package, die cut windshield, and pre-shaped landing gear. All decals included. The building time for the J3 kit is 14 to 30 hours.

The following items are needed to finish the model: 1 pair 3" wheels, motor, .29 to .35, motor mount, mounting bolts, a 8 oz. tank, fuel line, 1" tail wheel, throttle cable, 1/8 collars, 1/16 collars, foam saddle tape, glue and covering material.

M.E.N.
Model Engineering of Norwalk



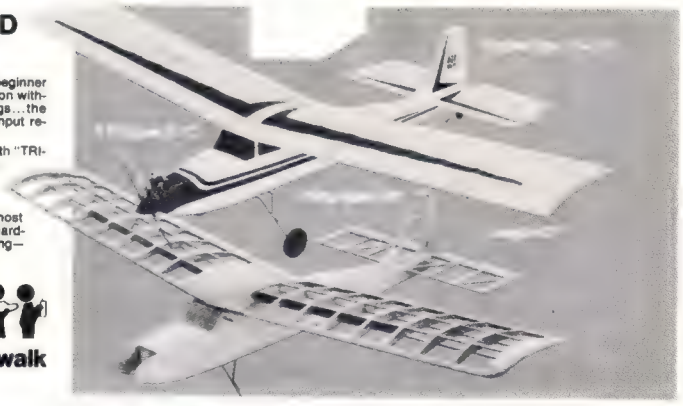
THE M.E.N. TRAINER NOW WITH "THRU-CUT" AND "TRI-SQUARE-LOC" CONSTRUCTION

The M.E.N. TRAINER was specifically designed for the absolute beginner in Radio-Control flying. It is by far the best trainer available on the market today. Over five years of extensive design engineering and development have led to its proven success. Its unique design, construction and flight characteristics makes your introduction to R/C flying an enjoyable experience. Even seasoned flyers have found the M.E.N. TRAINER a truly exciting and relaxing plane to fly. The M.E.N. TRAINER enables you to learn radio-control flying with minimum supervision and flight training time. Its slow flight and ease of command virtually allows hands-off control, while its distinctive, size and shape assure you maximum visibility and ease in recognition of plane attitude when flying beyond normal ranges. Beginner...or seasoned pilot. Choose the M.E.N. TRAINER and see what flying R/C is all about.

FEATURES: Under-cambered wing with ample dihedral for slow, stable flight. The M.E.N. Trainer flys 8-10 M.P.H. • Trainer will recover hands-off from any attitude in 100 feet or less of altitude loss when properly trimmed-allows beginner to re-orientate himself • 3½ lb. Flying weight with average radio-control sets. 13 oz./sq. ft. Wing Loading • Uses .15-.25 engine for fuel economy • Large, roomy fuselage for ease of radio installation...old or new • New "construction—instruction" flying booklet to help the beginner in R/C • Sturdy Plywood-Spruce-Balsa construction withstands beginner abuse • For those first landings...the M.E.N. Trainer will virtually land itself with little input required from the beginner pilot.

M.E.N. KIT: "THRU-CUT" die cutting combined with "TRI-SQUARE-LOC" construction in lite ply, balsa, and spruce make construction fast and simple • Pre-formed landing gear and brace. Wrapping wire included • Easy to follow plans and instructions including a Monokote cutting guide for the most economical use of covering material • Generous hardware package included with each kit • Quick building—Approximately 12-25 Hours.

M.E.N.
Model Engineering of Norwalk



INTRODUCING THE NEW M.E.N. RC BUZZARD BOMBSHELL

M.E.N.'s re-creation of a classic old timer free flight, strengthened and modified for RC, meets the Society of Antique Modelers requirements for RC Old Time Competition.

May be flown Free Flight, Rudder Only, Rudder/Elevator, Rudder/Elevator/Throttle.

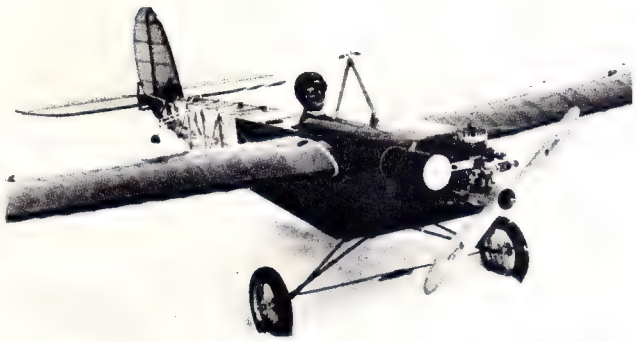
M.E.N.
Model Engineering of Norwalk



MEN72000	MEN TRAINER (.15-.25)	31.95	23.95
MEN73000	MEN BUZZARD BOMBSHELL	49.95	39.95
MEN73100	MEN TRAINER 40	49.95	39.95
MEN73200	MEN J-3 PIPER CUB	44.95	35.95

MICHIGAN HOBBY HANGAR

MISS VINTAGE



A realistic oldy for .25 to .35 engines. Designed to look complicated and yet easy to build. A slow easy flying aircraft that really attracts attention!

QUICKIE BIPE



A .15 to .19 sized 3 channel cabin bipe that builds fast is super stable and fun to fly. Wind penetration is excellent. Maximum enjoyment on a minimum budget!

QUICKIE



A Fred Reese design and a quarter midget trainer for .09 to .15 engines. Extremely fast building and capable of spectacular performance with a hot .15 Excellent choice for club racing and sport flying.

SMALL WONDER



A realistic parasol EAA Homebuilt type aircraft. Designed for easy building and flying. Extremely docile with good ground handling and excellent wind penetration!

NEGOTIATOR



A realistic Sport-Pattern ship for .35 to .45 engines. The Negotiator will suit your flying needs as well as do it with a model that looks like an Airplane!

SPECIFICATIONS

KIT	WING SPAN	WING CHORD	SQ. IN. AREA	FUSELAGE LENGTH	# OF CHANNELS	ENGINE SIZE	FLYING WEIGHT
Miss Vintage	59"	11¼"	560	45"	4	.25-.35	4-4½ lbs.
Quickie Bipe	38"	6-3/8"	460	27"	3	.15-.19	2-3/4 lbs.
Small Wonder	46"	7"	320	28"	3	.09-.15	2½ lbs.
Quickie	38"	8"	300	27"	3	.09-.15	2¼ lbs.
Negotiator	54"		575	42"	4	.35-.45	4½-5 lbs.

Michigan Hobby Hangar is exclusively an R/C Kit manufacturer. We are model builders ourselves and know the problems modelers have. These kits are engineered to put the FUN back in R/C flying! All Michigan Hobby Hangar kits feature quality Sig balsa, aircraft plywood, and spruce and all parts are band sawn and hand sanded. A complete building and flying manual comes with each kit and all kits are designed to build fast and fly well. A super hardware pak is included in all kits, pushrods, clevises, control horns, landing gear, hinges plus much much more are included for your convenience.

MHH72000	MICHIGAN HOBBY QUICKIE BIPE	35.95	25.25
MHH72001	MICHIGAN HOBBY QUICKIE	28.95	20.25
MHH72002	MICHIGAN HOBBY SMALL WONDER	35.95	25.15
MHH73000	MICHIGAN HOBBY MISS VINTAGE	54.95	38.45
MHH73001	MICHIGAN HOBBY NEGOTIATOR	54.95	38.45

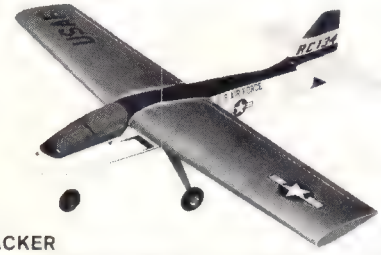
MIDWEST



CARDINAL
All molded foam A.R.F. for .049-.15 and one to four channel radio. 46" span, ideal beginner's model. Quick builder, dense foam gives robust model.
Kit No. **125**



SUPER CHIPMUNK
A.R.F. injection molded foam. Engines .10 to .19. Wing Span 46 inches. Three Channels: Aileron, Elevator Engine Throttle. Four Channels: Rudder, Elevator, Engine Throttle and Ailerons. Complete plans, with step-by-step illustrations.
Kit No. **126**



ATTACKER
Attacker – all-molded styrofoam R/C airplane that goes together fast and gets you into the fun of flying sooner. It's a rugged breed and can be a great sport plane or an easy-to-fly advanced trainer. The shoulder-winged Attacker has a big 48" wing with an area of 430 sq. in. It can be powered from a .19 to .35 engine and it is capable of performing most of the AMA pattern maneuvers easily. The kit contains building materials, illustrated step-by-step plans and a complete hardware package. All you need is glue, pins, knife, sandpaper, covering material and a radio. For 4 channel radio.
Kit No. **134**



DAS LITTLE STIK
Wing Span 46 inches. Engine Sizes .19 to .23. An ultra simple multi channel trainer by Larry Leonard and Bud Anders.
Kit No. **122**

SWEET STIK
Wing Span 54 inches. Engine Sizes .19 to .45. Larger version of the even popular Little Stik.
Kit No. **128**

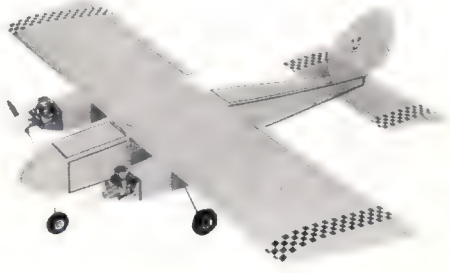


TRI SQUIRE
Wing Span 52-1/2 inches. Engine Sizes .09 to .19, Intermediate. This stable flyer is an ideal multi trainer. The perfect step up from rudder only models.
Kit No. **106**

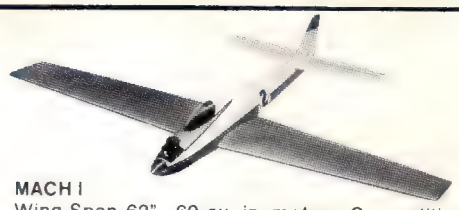
LIL TRI SQUIRE
Wing Span 40 inches. Clean, functional lines. Simplicity of construction. Top quality material and prefabrication. Light enough for escapement flying yet roomy enough for .099.
Kit No. **109**



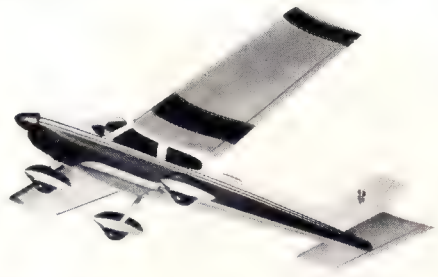
NICK ZIROLI'S HEINKEL 162
Wing Span 56 inches. Engine .40 with Axiflo RK-40. Radio 4 Channel. The perfect companion to Axiflo RK-40. Scaled after Germany's HE-162, the Heinkel gives you the flight performance you want. Kit consists of balsa wood fuselage and empenage. Foam core wing and balsa covering material. Vacuum formed canopy, preformed landing gear, authentic decal sheet, and micro-cut balsa wood. This kit is not for the novice. If you like to build, you'll love the results! Truly a unique looking aircraft that you'll be proud of. (AXIFLO RK-40 IS NOT INCLUDED IN KIT)
Kit No. **142**



TWIN STIK TRAINER
Wing Span 54 inches. Engines -2-.19-.30. Radio 4 Channel. Here's a twin that will get you in the air fast. The Twin Stik Trainer can be flown with -2-.19-.30 size engines. Single engine performance is exceptional. The kit contains hardware including lightweight aluminum engine mounts & nylon blocks. All wood construction featuring micro-cut balsa.
Kit No. **143**



MACH I
Wing Span 62", .60 cu. in. motors. Competition "pattern" airplane with impressive wins record. Uses four channel radio. Retracts optional.
Kit No. **127**



CARDINAL SQUIRE
Wing Span 73 inches. Engine Sizes .40 to .60. Foam wing and stabilizer cores, balsa covered. Balsa and plywood fuselage – die cut parts. Tough vacuum formed plastic engine cowling. Vacuum formed front and rear windshields. Vacuum formed wing fairings – no tricky carving. Complete hardware pack of fittings and fasteners. Full size completely illustrated plan with step-by-step instructions.
Kit No. **129**



STRIKEMASTER
Wing Span 55 inches. Engine Sizes .19 to .40. Foam wing cores, balsa covering supplied. Balsa and plywood fuselage all die cut. Balsa sheet fin and stabilizer, machine cut. All fittings, hardware and formed wire parts supplied. Full size, logical, completely illustrated plan.
Kit No. **130**



PITTS SPECIAL
Wing Span 48 inches. Engine Sizes .40 to .60 cu. in. All balsa and ply parts die or machine cut, with pieces for each wing, fuselage and hardware separately packaged and labeled. Comprehensive hardware package. Ready formed wire parts. Moulded crystal clear canopy for color scheme. Fuel proof decal sheet.
Kit No. **131**

MID72106	MIDWEST #106 TRI SQUIRE	29.95	21.75
MID72109	MIDWEST #109 LIL TRI SQUIRE	22.95	16.65
MID72122	MIDWEST #122 LITTLE STIK	32.95	23.10
MID72125	MIDWEST #125 CARDINAL ARF	29.95	21.75
MID72126	MIDWEST #126 SUPER CHIPMUNK	29.95	21.75
MID73128	MIDWEST #128 SWEET STIK	39.95	27.95
MID73130	MIDWEST #130 STRIKEMASTER	69.95	46.85
MID73134	MIDWEST #134 ATTACKER	39.95	28.95
MID73142	MIDWEST #142 HEINKEL 162	74.95	55.95
MID73143	MIDWEST #143 TWIN STIK TRAINER	49.95	35.95
MID74127	MIDWEST #127 MACH 1	94.95	69.95
MID74129	MIDWEST #129 CARDINAL SQUIRE	84.95	62.95
MID74131	MIDWEST #131 PITTS SPECIAL	94.95	69.95

MILE HIGH MODELS

SUPER JOY STICK

THIS KIT CONTAINS THE MOST COMPLETE HARDWARE PACKAGE AND FINEST BALSA OF ANY ON THE MARKET. IT IS A PRECISION MACHINE CUT KIT DESIGNED FOR THE FAST BUILDING, STRENGTH AND PERFORMANCE EVERY SPORT FLIER LOOKS FOR IN THE PLANE HE FLIES YET A NOVICE CAN FLY AND LAND THE SUPER JOY STICK LIKE A PRO. I AM CERTAIN YOU WILL BE ENTIRELY SATISFIED WITH THE SUPER JOY STICK.

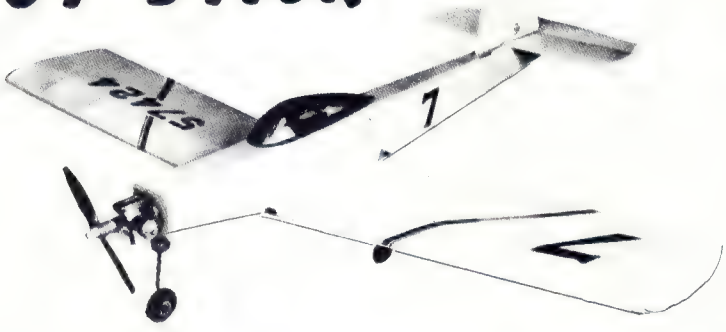
Walt L. Royalty



SPECIFICATIONS:
ENGINE: .15 - .25
SPAN: 46" - 15%
AREA: 405 sq. in.
LENGTH: 33-1/2"
WEIGHT: 40 - 44 oz.
RADIO: 4 ch.

A NEW BREED OF HALF-A JOY STICK

FEATURES:
TOP QUALITY BALSA
PRECISION CUT PARTS
FORMED LANDING GEAR
COMPLETE HARDWARE
PRE-CUT PLY & HARDWOOD
FAST- STRONG CONSTRUCTION
CANOPY & DECAL
INSTRUCTION BOOK & PLANS



SPORT PYLON
OR
TRAINER

SPECIFICATIONS:
ENGINE: TEE-DEE .049 - .09
SPAN: 38-1/2" - 15.5%
AREA: 266 SQ. IN.
LENGTH: 29-7/8"
WEIGHT: 22 - 28 OZ.
RADIO FUNCTIONS: 2 CH.
3 CH. WITH THROTTLE

HORNET



1/2 A FLYING AT ITS BEST THAT'S WHAT YOU GET WHEN YOU BUILD THE HORNET. PRECISION CUT QUALITY BALSA & PLY WITH COMPLETE HARDWARE RIGHT DOWN TO THE .049 ENGINE MOUNT MAKE THE HORNET ONE OF THE BEST VALUES FOR YOUR MODELING DOLLAR.



P-68 VICTOR

This 42" span ½A Twin is for two .049 or .051 Cox engines. It is stand off scale and flies great on one engine. This all balsa kit includes full hardware.

MHM72001	MILE HIGH MODELS JOY STICK	18.95	15.95
MHM72002	MILE HIGH MDLS SUPER JOY STICK	36.95	25.25
MHM72003	MILE HIGH MODELS 1/2 A HORNET	20.95	16.75
MHM72068	MILE HIGH MODELS P-68 TWIN 049	36.95	25.95

MRC

How to win friends and influence people

. . . arrive on the flying field with MRC's new Piper Cherokee

This low wing RTF was made for the sport flier. And like its high wing sister ship, MRC's Cessna 177, it's complete in every important respect right out of the box. You'll be the envy of your flying buddies . . . they'll want to know how you gave it that smooth, clean finish. They won't believe it only took an hour to assemble . . . so why bother telling them?

This stand-off scale model comes finished and painted. All hardware is included and an MRC-ENYA .40 is mounted. The fuel tank is installed and even the four control rods are ready to go. You've got yourself a professionally built, uncommonly attractive plane . . . but that's only the beginning.

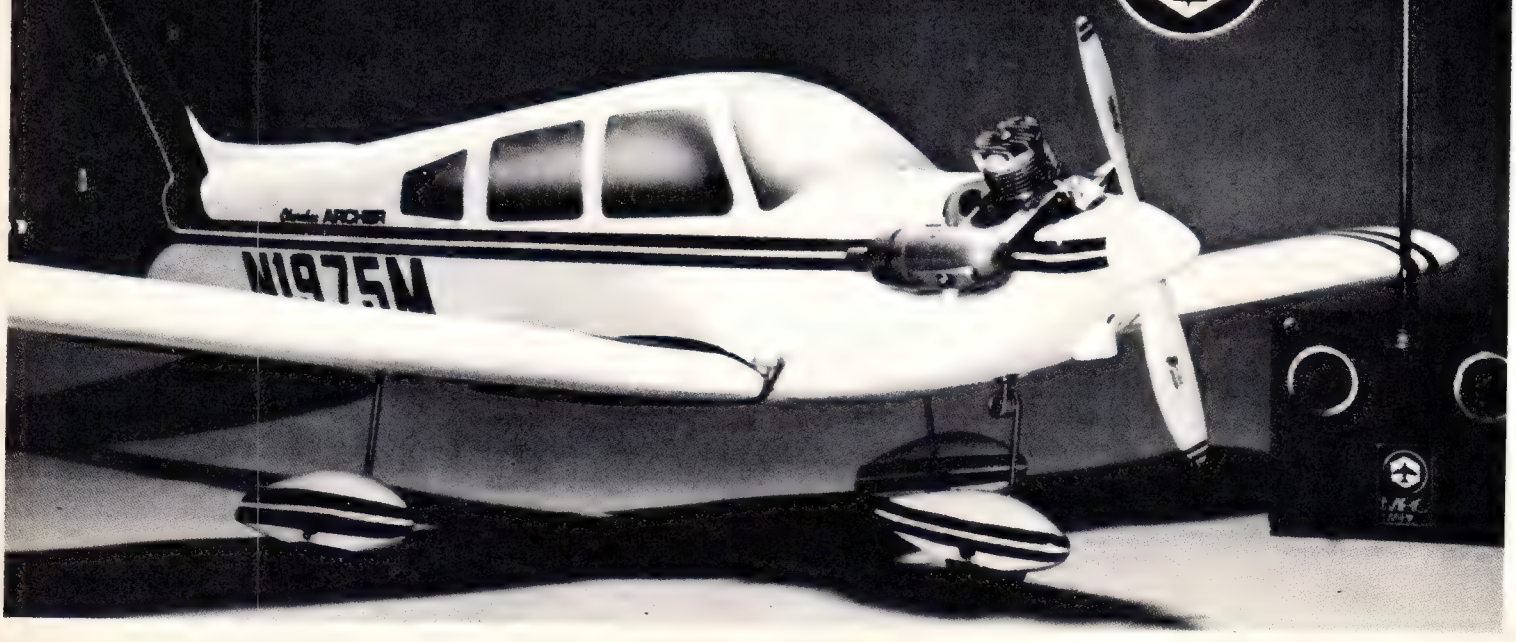
When you put it up there is when you become a field general . . . a leader. This MRC-Piper Cherokee RTF will make you look like an expert, whether you deserve it or not. You'll find it has great wind penetration characteristics for those gusty days. And as you sharpen your skills you'll start performing . . . rolls, loops, touch and go, stall turns, Cuban 8's . . . you'll gain some friends, some influence, and probably some envy, too.

MRC's Piper Cherokee RTF . . . great looks, great performance, a great buy, right out of the box. See your hobby dealer . . . and increase your sphere of influence.

Specifications: Wing Span: 57.5"; Wing Area: 531 sq. in.; Engine: MRC-Enya .40 with muffler; Fuselage: Fiberglass

Available with and without radio (Mark V 5 channel, or other complete MRC system)

MODEL RECTIFIER CORPORATION
2500 Woodbridge Ave., Edison, N. J. 08817



MRC



MRC has taken the A out of ARF!

MODEL RECTIFIER CORPORATION • 2500 WOODBRIDGE AVENUE • EDISON, NEW JERSEY 08817



SEE NEXT PAGE FOR PRICES

COMPLETE WITH RADIO

MRC's Cessna 177 is complete in just about every important respect including an MRC Mark V five channel radio. Any beginner or confirmed sport flyer, can now own a fine scale model of this popular Cessna in completely finished, ready-to-fly-form. Make no mistake, this is not a formed sheet plastic ARF, but rather a fiberglass airplane that combines many familiar modeling materials for a look that was previously only achieved after many hours in your workshop.

RUGGED AND READY

Fuselage is rugged fiberglass, wing and stabilizer are fully sheeted, all control surfaces (ailerons, rudder and elevators) are hinged, all push rods are finished and installed, an Enya 35 is mounted, as is its tank; wheels are installed and the servo tray is in place. A strong tricycle landing gear features steerable nose wheel and Cessna style main gear. The entire aircraft is beautifully finished and striped in a three tone, fuel proof paint.

IN THE AIR IN 1 HOUR

Your entire work can be done in one hour and involves mounting the servos, connecting the finished pushrod to servos and placing the receiver and battery pack in place. That's about it, and you're ready for the best scale flying you've ever experienced.

MRC's Cessna is ideal for the beginner who wants a trainer that looks great and can stand the gaff of his first flights. At the same time it's perfect for the flyer who wants a real looking airplane for stable flight and good maneuvers at those Sunday flying sessions. This airplane keeps you out of the shop and gets you onto the flying field . . . and isn't that what it's all about?

Specifications: Wing span: 55"; Area: 500 sq. in.; Overall Length: 41"; Flying Weight: 5 lbs.; Power: Enya 35, with muffler; Radio: MRC Mark V with 4 servos.

MRC

MRC READY-TO-FLY PLANES

JUST LOOK AT THESE FEATURES
IN A TRUE READY-TO-FLY FORMAT.

NEW YOU WON'T FIND THEM
ANYWHERE ELSE.



THE GLO ENGINE TRAINER–
WITH MRC-ENYA .15 TV ENGINE
ALREADY INSTALLED

●Muffler installed●Fuel tank in place●Control rods and horns installed ●Glo plug and propeller included●Brightly colored foam●Decal in place ●Anti-stall wing tips designed to aid in landing●Engineered so that two channel radio is sufficient to control nosewheel steering, rudder and elevator●Third channel can be used for control of throttle valve engine if desired●Can be assembled ready to go within one hour.

SEE PAGES 50 AND 51 FOR THE MRC CESSNA AND CHEROKEE READY TO FLY PLANES.

MRC72000	MRC RTF FLITE TRAINER W/ENY 15	98.00	83.25	52
MRC73001	MRC RTF CESSNA W/ENYA .35 RC	369.95	295.95	51
MRC73002	MRC RTF CHEROKEE W/ENYA .40 RC	419.95	335.95	50

MODEL DYNAMICS

GRYPHON

Fun to Fly

AEROBATIC R/C SLOPE SOARING GLIDER

RELIABLE • PROVEN DESIGN • STABLE



WING SPAN: 67 INCHES
WING AREA: 965 SQ. INCHES
LENGTH: 34 INCHES
AIRBORNE WEIGHT: 2.5 LBS.
RADIO EQUIPMENT: 2 CHANNELS
ELEVON CONTROLS

Flys Like a Powered Multi

AEROBATIC FLIGHT—SPINS
INVERTED FLIGHT—ROLLS
INSIDE-OUTSIDE LOOPS
FLYS IN LOW-LIFT CONDITIONS
EXCELLENT LOW SPEED CHARACTERISTICS

BUILDING TIME 12-18 HOURS

- ★ SELECTED BALSA
- ★ PRECISION MACHINED PARTS
- ★ SLOTTED LEADING & TRAILING EDGES
- ★ PARTS EASILY IDENTIFIED
- ★ BUILDS FLAT ON TABLE NO WING JIG NECESSARY
- ★ STEP-BY-STEP INSTRUCTIONS
- ★ ALL HARDWARE AND CANOPY

Easy to Assemble

MOD71001	MODEL DYNAMICS GRYPHON	49.95	39.95

NOSEN

Bud Nosen's spectacular

102″ P-51 D



- Stand-off Scale
- 2.75″ equals 1′
- 102″ Span
- 16.5# flying wt.
- 1800 sq. in. wing
- 26¼″ chord at root

- 4 channel radios required
- Designed for .60 engines with prop driver
- Very stable flyer
- Proof of scale 3 views
- Kit includes 21″ canopy

- No foam or plastic
- 6″ spinner is not included available direct only $16.95
- Huge rolled Plans
- Machine and die-cut parts
- Decals not included

BUD NOSEN MODELS, INC.

Box 105 **Two Harbors, MN 55616**

THINK BIG!!

It all started back in late 1973 when Bud Nosen came out with his first ¼ scale Aeronca Champ. Tower immediately put it in the 1974 Catalog and acceptance wasn't all that overwhelming — but the seed was planted. And it has grown into the most current and exciting segment of our hobby.

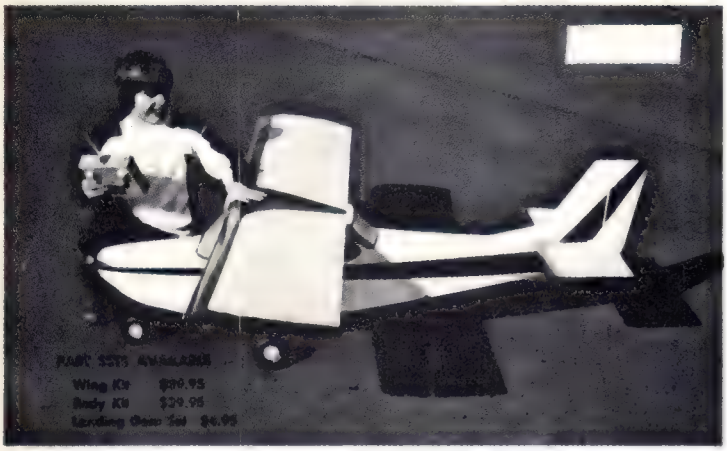
¼ scale, ⅓ scale, monster-sized, big mudders, or whatever you prefer to refer to them as, the large aircraft like Bud Nosen's are here to stay thanks to recent developments and new products to handle these giants. Power is supplied by chain saw engines like Quadra (page 155) or Suevia (P-153) and Webra (P-157) or with gear reducer drives like the Dubro unit (P-214). Dubro makes big wheels (P-262) and Rhom and Sonic-Systems are coming out with huge retracts. Join the excitement, try one!!

SEE THE NEXT TWO PAGES FOR MORE BUD NOSEN MONSTER-SIZED MODELS. PRICES ARE BELOW.

NOS74001	BUD NOSEN AERONCA CHAMP - 9 FT	99.95	79.95	55
NOS74002	BUD NOSEN CESSNA 310 TWIN-10FT	169.95	135.95	55
NOS74003	BUD NOSEN CITABRIA - 9 FT	99.95	79.95	55
NOS74004	BUD NOSEN J-3 CUB - 9 FT	119.95	95.95	55
NOS74005	BUD NOSEN MR. MULLIGAN - 9 FT	139.95	111.95	54
NOS74006	BUD NOSEN GERE SPORT BIPE-8 FT	129.95	103.95	54
NOS74007	BUD NOSEN JENNY - 8 FT	129.95	103.95	54
NOS74008	BUD NOSEN TRAINER 8.5 FT	79.95	63.95	54
NOS74009	BUD NOSEN P-51D - 8.5 FT	169.95	135.95	53

NOSEN

102" SPAN
BUD NOSEN TRAINER



- 102 inch span
- Flying weight 10 Lbs.
- 1500 square inch area
- 15 oz./ft. wing load
- Designed for .60 engines
- Preformed wire gear
- Machine & die cut parts
- Huge rolled plans
- Fast Assembly
- Necessary Hardware
- 3 or 4 channel radios required
- No foam or plastic

• Designed and Produced by Bud Nosen

After observing a large number of beginners (and a few old timers) in recent years, we noted they all had about the same problems or complaints in learning to fly. The models all seemed to fly too fast, respond too quickly, were usually overcontrolled and their small 60 inch size seemed to make it difficult to see what the model was doing at times.
We think we have solved most of these problems with our 102 inch trainer! Recommended power is a .60 size engine ... a size you can stay with for years. Take offs and landings are at a very low speed. Control response is slow and many mistakes go unnoticed. Knowing what your model is doing at any given time is much easier because of the large size. Most beginners would like a model that looks like a real plane, so we designed our trainer to look like a Cessna 150.

8' SPAN 1/3 SIZE
STANDOFF SCALE
1933 GERE SPORT



- STANDOFF SCALE
- 96¼" SPAN TOP
- 90¼" SPAN BOTTOM
- FLYING WEIGHT 14.5 Lbs.
- 2790 SQUARE INCH AREA
- 12 oz. FT. WING LOAD
- .60 ENGINES REQUIRED
- PROOF OF SCALE 3 VIEWS
- MODEL IS 1/3 SIZE
- KIT IS ALL WOOD
- MACHINE and DIE CUT PARTS
- HUGE ROLLED PLANS
- 18 HOUR ASSEMBLY TIME
- NECESSARY HARDWARE
- FOUR CHANNEL RADIOS REQUIRED
- NO FOAM OR PLASTIC

• DESIGNED and PRODUCED by BUD NOSEN

A fine flying Standoff Scale Model of a highly successful Bi-Plane of the 30's. This is an all wood Kit that goes together fast. With its 12 oz. Wing Loading, it gets into the air in about 15 to 20 feet on a .60 size engine. Flying speed seems to be in the 15 to 20 M.P.H. range and when slowed down it is a breeze to land. Ultra simple wing construction with 1/32 ply webbing make this one really strong.

9' SPAN 1/4 SIZE
STANDOFF SCALE
"MR MULLIGAN"



- 108" Span
- 1575 Sq. inch wing
- .60 ENGINES & UP REQUIRED
- FLYING wt. 15 lbs.
- Machine Cut Parts
- Three Piece Wing

NO FOAM!
NO FOAM!
NO FOAM!

- 3 or 4 CHANNEL RADIO REQUIRED
- Huge Rolled Plans
- Fast Assembly
- Hardware
- Flys Like A Trainer

• Designed and Produced by BUD NOSEN

8-FOOT SPAN
CURTISS JN-4D JENNY



- Standoff Scale
- 97.75" Span
- 1,790 square inch area
- Length - 60"
- .45 to .60 Engines required
- Flying Weight 9.75 Lbs.
- Scale 2.25" = 1'
- Formed wire
- Kit is all wood, no foam or plastic
- Machine and Die Cut Parts
- Huge rolled Plans
- Necessary hardware
- Four channel Radios required
- Design by Ron Busch

An easy flying standoff scale model of one of the most popular biplanes of all times. A surprising performer, our proto-type models have flown very well in winds up to 25 M.P.H. Fly the Jenny for fun as shown, or go all out and add rigging and detail and you will have a serious competitor in standoff scale circles.

NOSEN

10 FOOT SPAN
1/4 SIZE STANDOFF SCALE
CESSNA 310 TWIN



- Fast Assembly
- .60 Engines REQUIRED
- 120" Span
- Huge Rolled Plans
- Hardware

NO FOAM!

- Flys Like A Trainer
- Three Piece Wing
- 18 lb. FLying Weight
- Machine Cut Parts
- Molded Cowls

- **Designed and Produced by BUD NOSEN**

An almost exact copy of CESSNA'S popular twin engine aircraft. Designed by BUD NOSEN, flight tested and modified to provide the smoothest flying model of its kind. Large lateral, wing, fin and horizontal stab areas make the loss of one engine non critical. Flown with twin .60's the 310 is as easy to handle as most trainers. Smooth easy take offs, gentle turns are built in characteristics of this big beauty!!!

9-FOOT SPAN
PIPER CUB J-3



- **Standoff Scale**
- **9' Span**
- **10.5 Lb. Flying Weight**
- **1,800 Square Inches**
- **.60 Engines and up required**
- **Fast building**
- **Bud Nosen Balsa and Plywood**
- **Necessary Hardware**
- **Rolled Plans**
- **Formed wire**
- **No Foam!**
- **Formed ABS Cowl**
- **Machine and Die Cut Parts**
- **Decals not included**

- **Design by Ron Busch**

Without a doubt the Piper Cub J-3 was the most popular light plane ever manufactured. Our 9' span J-3 is fast becoming one of the most popular kits ever produced. Its great popularity is due to ease of assembly, exceptional ground handling and superb performance in the air. Why not experience the thrill thousands of modelers the world over have enjoyed and move up to the BIG ONES.

9' SPAN 1/4 SIZE AERONCA "CHAMP"
SUPER SIZE STANDOFF SCALE



- **Super Fast Assembly**
- **.60 Engines and Up**
- **3 or 4 Channel Radio**
- **Rolled Plans**
- **Hardware**
- **105 ½" Span**
- **10 lb. All Upweight**
- **1500 sq. in. Wing**
- **All Wood Construction**
- **Machine Cut Parts**
- **Designed and Produced by BUD NOSEN**

Above prototype proved easy to fly, ground handling exceptional and takeoffs are a breeze. Touch and goes are something else.

9' SPAN 1/4 SIZE
CHAMPION CITABRIA



- 105 3/4" SPAN
- 1550 sq. inch wing
- 62 3/4" LONG
- FLYING WEIGHT 10 1/4 lbs.
- STRONG DURAL LANDING GEAR
- Machine Cut Parts
- 3 or 4 CHANNEL RADIO REQUIRED
- .60 Engines REQUIRED
- Fast Assembly
- Huge Rolled Plans
- Hardware
- Flys Like A Trainer
- Three Piece Wing

- **Designed and Produced by BUD NOSEN**

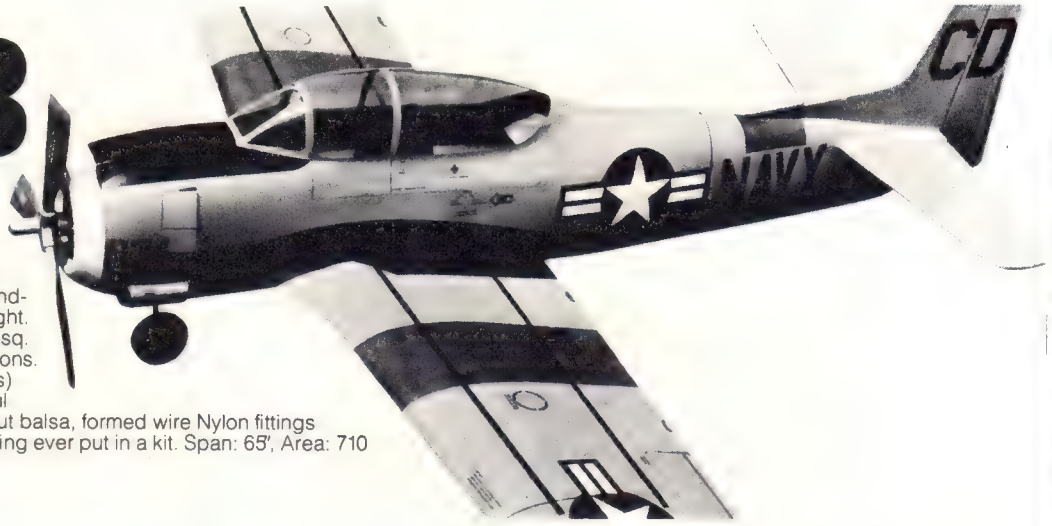
PICA (FORMERLY DAVE PLATT)

SPITFIRE



Still the best combination of looks & performance you can buy. Nobody ever designed a more elegant ship than the Spitfire. The model flies superbly and has won countless stand-off scale contests. The standard kit builds into a Mk. 9. Plan includes details for other Marks, like the beautiful Mk. 22.
Kit features: Machined and diecut balsa, formed LG, nylon fittings, metal parts & mouldings. Two full-size plans: complete radio & retract gear installation shown. Isometric diagram & illustrated instructions make building easy and fun. Six-color accurate decals. Span: 65", Area: 714 Sq.", 4 to 6 channel, Engine: .40 to .60

T28-B



Plenty of dihedral (7°) for lateral stability. Radial cowl prevents speed buildup in a dive. Large stabilizer and long tail moment give wide CG position tolerance. Special airfoil and washout maintain stability down to a very low speed. Tricycle LG makes good rough-ground handling and easy landings. Bright color schemes help pilot orientation in flight. Large flaps incorporated in basic design. Over 700 sq. ins. for light wing loading even when loaded with options.
Kit features: Our now-famous detailed plans (2 sets) showing flaps, retracts, RC equipment, etc. Beautiful 3-sheet detailed fuelproof decals. Machined & diecut balsa, formed wire Nylon fittings (flap hardware included), canopy and the best cowling ever put in a kit. Span: 65", Area: 710 sq.", 4 to 6 channel, Engine: .60

FW 190 D-9



The qualities that make a model a NATS winner are the same ones that Sunday sport-scale fliers look for. Exceptional appearance to start with, of course. The FW 190's stark and sinister shape has always excited modelers. But even more important are friendly flying qualities. Our designs have always emphasized safety at low speeds, and the FW 190 has inherited the ability to fly from 80-90 mph right down to a near-hover for landing. The wide-track gear makes it an ideal first "tail-dragger."
Kit features: Full-size plans showing radio and retracting gear installation. Color schemes (and decals) for THREE different FW 190's. Separate 16-page instruction booklet with cutaway diagrams and in-depth flying hints. Diecut and machined balsa, nylon fittings, formed wire cowl, canopy, etc. Span: 65", Area: 730 Sq. 4 to 6 channel, Engine: .60

PICA (FORMERLY DAVE PLATT)

THE WACO



We chose the Waco F-3 as our biplane flagship because it best represents the "Golden Era" of the 1930's, when flying was an adventure. Add to this, easy, snag-free building and safe, gentle flying—the result of the thorough kit engineering and careful prototype development that are features of all Platt Kits—and you have a satisfying building and flying experience ahead of you. **Kit features:** Top-quality diecut and machined balsa and plywood. Full size plans. Separate instruction book with isometrics. Decals. Injection-moulded (Not vacuum-formed) plastic cowl, cowl blisters, and wheel pants. All required nylon fittings. Formed wire landing gear & struts. Span: 60", Area: 950 Sq.", 4 to 6 channel, Engine: good .40 to .60

PICA PRESENTS ITS LINE OF QUALITY RADIO CONTROLLED FLYING MODEL KITS. Designed by Dave Platt.



Wing span: 67"
Wing chord: 14"
Total wing area: 795 sq."
Fuselage length: 54"
Stabilizer span: 27"
Verticle fin: 10¼"

Rec. engine: .23-.40
Rec. fuel tank: 8 oz.
Gear: Fixed or retract.
Channels: 4 (5 w/ret.)

Control functions: Ailerons, Elevator, Throttle, Rudder.

Construction: Balsa.
Plan sizes: 35" x 67"
Instruction manual and construction photos included.

Kit includes: Die cut balsa, shaped parts, hardwood, plywood, aileron torque rods, hardware and sample fillit.

Flying weight: 6-8 lbs.

The Duellist 2/40 has been designed as an easy-to-fly and safe handling twin engined R.C. model. Combining elegant appearance with simple structure, it's ideal for the modeler who has progressed through the usual trainers and pattern or low wing sport ships. As such, it offers a further level of enjoyment in the R.C. hobby, and a new accomplishment in flying skills to the builder.

PICA

2657 N.E. 188 St.
Miami, Florida
33180

PLA74001	PICA-PLATT RC1 SPITFIRE	79.95	59.95	56
PLA74002	PICA-PLATT RC2 T-28B	79.95	59.95	56
PLA74003	PICA-PLATT RC3 FOCKE WULF 190	79.95	59.95	56
PLA74004	PICA-PLATT RC4 WACO	79.95	59.95	57
PLA74005	PICA-PLATT RC5 DUELIST 2/40	89.95	67.45	57

PRATHER

Terry Prather's World Record Design LITTLE TONI



MOST CONSISTANT WINNER IN THE U.S.A.
- 1974 NMPRA POINT CHAMPION
- 1975 NMPRA POINT CHAMPION
- 1976 AMA NATIONALS
- 1976 NMPRA CHAMPION

Holds World's Speed Record For Pylon Racing

DELUXE KIT

SCALE: FORMULA 1 PYLON RACER

FEATURING . . .
- Epoxy Fiberglass Fuselage
- Epoxy Fiberglass Cheek Cowls with fillet
- Joined Epoxy Fiberglass Wheel Pants
- Aluminum Wheels
- Dural Landing Gear
- Flush Fitting Wheel Retainers
- Precision Cut Wood Parts
- Foam Wing Core
- Wing Skins
- All Wire Hardware
- Formed Canopy
- Complete Plans & Instructions
- Scale 3 View

SPECIFICATIONS . . .
- ★ Engine .40
- ★ Wing Span 50 in.
- ★ Wing Area 475 sq. in.
- ★ Weight 5 lbs.

New!

Now LITTLE TONI QUARTER MIDGET

SAME FEATURES AS OUR **LITTLE TONI** *FORMULA 1 RACER*

SPECIFICATIONS . . .
- ★ Engine .15
- ★ Wing Span 42 in.
- ★ Wing Area 310 sq. in.
- ★ Weight 2½ lbs.

"Meets New A.M.A. Rules"

DELUXE KIT



PRATHER PANTHER

SPORT-FUN-PATTERN

Designed by Terry Prather



SPECIFICATIONS . . .
- ★ Wing Span 64 in.
- ★ Wing Area 720 sq. in.
- ★ Flying Weight approx. 7½ lbs.
- ★ Engine Size .60

SPECIAL FEATURES . . .
- Epoxy Fiberglass Fuselage
- Epoxy Fiberglass Nose Cone
- Firewall Installed
- Foam Wing & Stab Skins
- Dural Landing Gear
- All Wood & Wire Parts
- Complete Plans & Instructions

The Panther fills the gap between the boxy type sport ships and the complicated competition pattern ships. The Panther utilizes the latest methods for quick, easy construction. The Panther's sleek lines will demand attention at the flying field while remaining a smooth and easy handling sport ship.

BUILDS IN A "JIFFY"

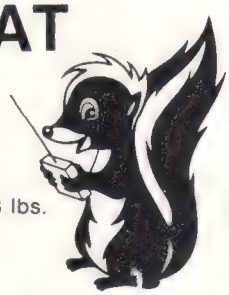
R/C TRAINER AND SPORT SHIP

THE POLE CAT



FEATURING
- Plywood Fuselage
- Sheet Balsa Tail Surfaces
- Hardwood Motor Mounts
- Pre-formed Wire Landing Gear
- Optional Landing Gear Skid
- Complete Photo Instructions
- Full Size Plans

SPECIFICATIONS
- ★ Wing Span 56 inches
- ★ Wing Area 420 sq. in.
- ★ Flying Weight 2½ to 3 lbs.
- ★ Engine Size .15 to .19
- ★ Radio 2 or 3 Channel

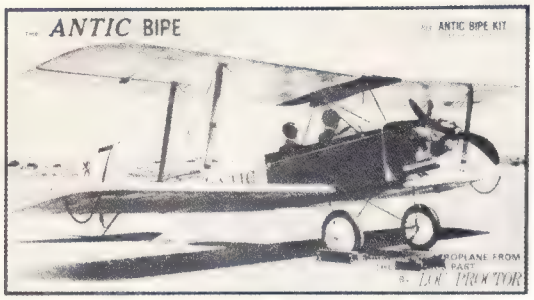


NO PAVED RUNWAY NEEDED. LANDS ON ANY OPEN AREA USING THE OPTIONAL LANDING SKID.

The **Pole Cat** is very aerobatic, easily doing loops, spins, immelmah turns, stall turns and much more yet comes in slow and easy for landings.

PRA72162	PRATHER LT162 1/4 MGT LIL TONY	69.95	55.95
PRA73001	PRATHER LIL TONY PYLON RACER	99.95	79.95
PRA73148	PRATHER PANTHER #148	99.95	79.95
PRA73154	PRATHER POLE CAT TRAINER PC154	29.95	21.95

PROCTOR



- A two seater for wheels or floats
- A one quarter size semi scale biplane that flies at a very low realistic air speed
- Extremely stable and easy to fly
- No ground looping or steering problems on take off or landing
- May be operated from small or rough fields
- Fully acrobatic and capable of very spectacular performance with the minimum of flying skill
- Simple assembly, easy construction and fun as well
- Kit includes all fittings, turnbuckles, cables, precut parts, etc

SPECIAL FEATURES

- Wing span 1536 sq. span 64
- Maximum power requirements use any engine 45 and up
- Only 1 line ready for flight
- Authentic scale construction using the unique combine with all balsa service plywood, and hardwood
- Four large sheets of highly detailed full scale plans rolled
- Every step in the assembly of this kit is covered by a construction manual and photos
- All parts of the kit are extremely accurate and of the highest quality materials

- Hardware has been formed and preassembled
- Cable controls to all surfaces
- Easily detachable wings for transportation
- Cable wing rigging with working turnbuckles
- Fuel proof decals for the sides of the fuse
- Float attachment points
- Conversion time wheels to floats approximately (5) minutes
- Wood stain and dye instructions

PROCTOR ENTERPRISES
P. O. BOX 9841
SAN DIEGO, CALIF. 92109

ANTIC FLOAT KIT
SEE PRICE LIST



RCM PRODUCT TEST

PROCTOR ENTERPRISES MINI-ANTIC





IMPRESSIONS	E	G	A	F	P	IMPRESSIONS	E	G	A	F	P
Packaging	●					Pre-Shaped Parts	●				
Plans	●					Parts Match to Plans	●				
Written Instructions	●					Overall Parts Fit	●				
Quality of Hardwood	●					Ease of Assembly	●				
Quality of Fiberglass			NA			Fidelity to Scale			NA		
Other Materials		●				Flight Performance	●				
Accessories		●				Overall Appeal	●				
Die-Cutting			NA								

E - Excellent / G - Good / A - Average / F - Fair / P - Poor

SPECIFICATIONS

Name	MINI-ANTIC
Aircraft Type	Sport Trainer
Manufactured By	Proctor Enterprises P.O. Box 9841 San Diego, California 92109
Mfg. Suggested Retail Price	$55.50
Available From	Both Mfg. and Retail Outlets
Mfg. Recommended Usage	Int. Powered Trainer & General Sport
Wing Span	56 Inches
Wing Chord	9¾ Inches
Total Wing Area	546 Square Inches
Fuselage Length	44½ Inches
Radio Compartment Dimensions	(L) 8½" x (W) 3½" x (H) 3½"
Wing Location	Shoulder Wing
Airfoil	Undercamber
Wing Planform	Constant Chord
Dihedral	2 Inches
Stabilizer Span	18 Inches
Stabilizer Chord (Incl. elev.)	7" (Avg.)
Total Stab Area	126 Square Inches
Stab Airfoil Section	Flat Bottom
Stabilizer Location	Top of Fuselage
Vertical Fin Height (Incl. rud.)	7½"
Vertical Fin Width (Incl. rud.)	8 Inches
Mfg. Rec. Engine Range	.19-.29
Recommended Fuel Tank Size	6 Oz.
Landing Gear	Conventional
Recommended No. Of Channels	4
Recommended Control Functions	Rud., Elev., Thrut., Ail.
Basic Materials Used in Construction:	
Fuselage	Spruce, Ply & Bamboo
Wing	Ply, Spruce, Balsa, Bamboo, Reed
Tail Surfaces	Balsa, Ply & Bamboo
Hardware Included in Kit	Very Complete
Plan Size	78" x 36" (1 sheet)
Building Instructions on Plan Sheets	Yes
Instruction Manual	Yes (19 pages)
Construction Photos	Yes
Kit Includes	Shaped Parts
Mfg. Rec. Flying Weight	72 Ounces
Wing loading based on rec. flying wt.	19 oz./sq. ft.

RCM PROTOTYPE

Weight, Ready To Fly	84 Ounces
Wing Loading	16.8 oz./sq. ft.
Covering & Finishing materials used	K & B Superpoxy, Randolph Sepa
Engine Make & Disp.	K & B .19 RC
Muffler Used	No
Radio Used	Cox Sanwa 4 channel
Tank Size Used	8 Ounce

● The Mini-Antic kit produced by Proctor Enterprises is exceptional in all respects, however, there are a few points that you might want to consider during construction that will make the finishing easier. In the instructions, it is suggested that you stain the stringer material before you start construction. We would suggest that you also fuel-proof them with an acetate base product at the same time. In addition, the bamboo used for the cross bracing could be painted black before it is installed, since this leaves only a small amount of touch-up instead of a more difficult chore. You will also note that, when rigging the flying wires, you are told to "safety" the turnbuckles. It must be assumed that you know how to do that - - - if you don't, get in contact with an E.A.A. member who has a copy of the manual on full-size aircraft rigging. Be sure that you do "safety" your turnbuckles, whatever method you may use. Lou Proctor has another beautiful kit in the Mini-Antic. This reviewer had been reluctant to build a kit from this company because we thought it would take too long and would be too much work, although their reputation for quality is unsurpassed. We were completely wrong in this respect - - - this kit went together better than most we have built and it was completed in no more time than it takes to complete a good Formula I aircraft. The best part of the kit is the feeling of having built a fine miniature aircraft. The plane is intended to be flown as a full house model. There are instructions included with the kit for flying it with only three channels. We have tried this and have had good results. The Mini-Antic is a docile aircraft that is truly a joy to fly and certainly draws a lot of attention when it is brought out to the field. Almost everyone watches when this aircraft takes to the air. We would also feel safe in helping a new modeler learn to fly with the Mini-Antic, since it has no bad habits and it is pure satisfaction to fly. The K & B .19 used in our prototype provides realistic power. If you wanted a more agile performer, the designer suggests up to a .29 engine.



THE ANTIC MONO

From the Era of
"Those Magnificent Men and their Flying Machines"

- The ANTIC in flight creates the atmosphere of another era.
- An introduction to the art of building Radio Control Scale.
- A one quarter size semiscale monoplane that flies at a very low realistic air speed.
- Extremely stable due to a special airfoil and easy to fly without any previous R/C experience.
- Has special provisions for rudder steering for the beginner.
- Has no ground looping or steering problems on take off or landing.
- May be operated from small or rough fields.
- May be flown as a seaplane or landplane.
- Conversion time to wheels or floats approximately five (5) minutes.
- Large size 81½ inch wing span.
- Uses .35 thru .61 engines.
- Fully acrobatic and capable of very spectacular performance with the minimum of flying skill.
- Simple Assembly, easy construction, and fun as well.
- Kit includes all fittings, turnbuckles, cables, pre-cut parts and so forth.

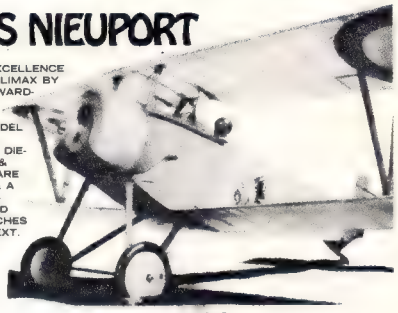
SPECIAL FEATURES

- Highly detailed full-sized plans. Three large sheets showing both the L.H. and R.H. wings. All sheets are rolled for your convenience.
- Every step in the assembly of this kit is covered in detail by a construction manual and photos.
- All parts in the kit are extremely accurate and of the highest quality materials.
- All hardware has been formed and preassembled.
- Cable controls to the tail surfaces.
- Readily detachable wings for easy transportation.
- Cable wing rigging with working turnbuckles.
- Fuelproof decals for the sides of the fuselage.
- Float attachment points.
- Wood stain and dye instructions.

ANTIC KIT & PLANS COMPLETE NO. 701

PROCTOR'S NIEUPORT

A LIFETIME OF MODELING EXCELLENCE BROUGHT TO A BRILLIANT CLIMAX BY LOU PROCTOR WITH THIS AWARD-WINNING MASTERPIECE . . . ABSOLUTELY THE MOST COMPLETE & ACCURATE MODEL EVER KITTED! CONTAINS HUNDREDS OF PRE-FORMED, DIE-CUT, EXTRUDED, MACHINED & HAND-MADE PARTS. THERE ARE 3 FULL-SIZE PLAN SHEETS & A 32 PAGE STEP-BY-STEP CONSTRUCTION MANUAL JAMMED WITH LARGE PHOTOS, SKETCHES & EASY TO UNDERSTAND TEXT.



THE NIEUPORT II

- Offered for your pleasure, the worlds finest kit that will enable you to build a flying scale of this famous French Fighter
- A kit for the creative person whose interest in scale goes beyond the ordinary.
- Selected for its simplicity, appeal and the fact that it was the first of a series of famous French Fighters
- Scaled 2½" to the foot to achieve a light wing loading for slow scale flight characteristics and good stability. This large size, over 8 foot wing span allows ample room for fine detailing of all parts and the use of a large engine capable of swinging a scale diameter propeller.
- Highly detailed. Considering, however, the extent to which the internal and external details of the full size ship have been duplicated here, this is not a difficult kit to assemble. It can be completed up to the covering stage in 5 to 8 weeks. We do not recommend however rushing thru this project as it is one that should be savored and enjoyed like a good wine or a fine cigar

IN THE KIT.

- A full set of rolled plans will be included. These will cover every aspect of the construction with in addition, highly detailed views of such items as the rotary engine, propeller machine gun, etc.
- The construction manual - step by step presentation with many B & W photos
- Proof of scale references
- Formed metal stampings
- Pretailored fittings
- Spun metal cowling
- Rigging cable, wedge fittings, and turnbuckles
- Formed bamboo wing tips and tail sections
- Prelofted longerons
- Die cut ribs and precision machined wood parts
- Extruded aluminum tube landing gear and center section struts as per actual plane
- Machined fittings
- Control horns and cable controls
- Aluminum aileron torque tubes
- Scale Indian Head Insignia Decals
- Scale Rudder Number Decals
- Wood dye instructions for those who wish to match the varnished woodwork of the actual plane

KIT & PLANS COMPLETE NO. 801

NIEUPORT II SPECIFICATIONS.

- Large size over five foot wing span 7'-1"
- Scale in flight characteristics true and stable
- Performs all the maneuvers of the full size ship
- All flying surfaces are scale thin airfoil section, and method of attach
- Internal as well as external construction is scale. Accompanying enlargements are actual photos of the prototype model before and after covering
- Upper and lower wings can all rigging removed as a unit for transportation and storage
- All controls are operated by cables or torque tubes as per the full size ship
- Wing span 61 inches
- Wing area 750 square inches
- Overall length 47 inches
- Overall height 22 inches
- Weight 7 lbs.
- Engine .56 and up

RCM PRODUCT TEST courtesy of RC Modeler Magazine.

PRC74505	PROCTOR MINI-ANTIC #505	59.95	47.95
PRC74701	PROCTOR ANTIC MONO #701	89.95	71.95
PRC74703	PROCTOR ANTIC BIPE #703	106.95	85.55
PRC74801	PROCTOR NIEUPORT II #801	164.50	123.40

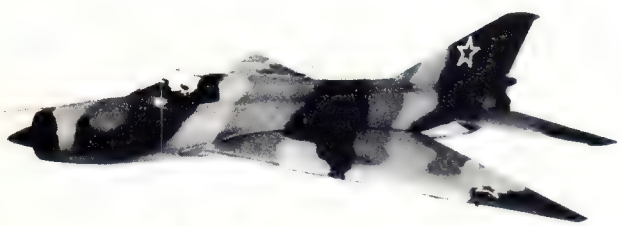
R & S

Stand-off Scale Jet Fighters



F-16A

Wing Span	48″
Fuselage	56″
Engine	60 cu. in.
Total Wing Area	680 sq. in.
Total Weight	7½ lbs.



MIG-21

Wing Span	48″
Fuselage	55″
Engine	60 cu. in.
Total Wing Area	690 sq. in.
Total Weight	7½ lbs.



F-5

Wing Span	50″
Fuselage	55″
Engine	45-60 cu. in.
Total Wing Area	680 sq. in.
Total Weight	7½ lbs.

EACH KIT CONTAINS:

- Fiberglass fuselage with fin in place
- Fiberglass belly pan
- Foam wing cores
- Foam stab cores
- ¼″ fire wall
- Sidewinder missiles
- Landing gear blocks
- Designed for retractable landing gear
- Complete, easy instructions
- Balsa sheeting for wing and stab
- Balsa leading and trailingedges for wing and stab
- Balsa rudder, elevators and ailerons

FREE PERFECT PAINT!

Each kit contains a certificate good for 3 cans of paint. (Spray or regular, any color.)

REPLACEMENT PARTS ALWAYS IN STOCK

New Delta Wing Foam and Fiberglass Design

The ultimate in modern weaponry. Introducing the General Dynamics F-16 Fighter. It is light, solid and durable. The fuselage is fiberglass and the wing and stab cores are made from lightweight foam. It's the kind of model that will compete with the best in stand-off competition or give hours of pleasure to the Sunday flyer.

This sleek stand-off scale model of the MIG 21, the famous Russian jet fighter used in the Israel War, is a beauty. It is light, solid and durable. The fuselage is fiberglass and the wing and stab cores are made of lightweight foam. It's the kind of model that will compete with the best in stand-off competition or give hours of pleasure to the Sunday flyer.

Introducing the Northrop F-5 Freedom Fighter. An aircraft used by the US and her allies around the world. It's light solid and durable. The fuselage is fiberglass and the wing and stab cores are made from lightweight foam. It's the kind of model that will compete with the best in stand-off competition or give hours of pleasure to the Sunday flyer.

R+S74000	R+S F-16A JET FIGHTER-DELUXE	129.95	97.50
R+S74100	R+S MIG-21 JET FIGHTER-DELUXE	129.95	97.50
R+S74200	R+S F-5 JET FIGHTER-DELUXE	129.95	97.50

ROYAL PRODUCTS

From the top of the stack to the bottom, "ROYAL SCALE" takes the modeler one step further than "standoff." Hand-craftsmanship coupled with select materials help produce a degree of scale accuracy that sets the Royal line apart from other balsa models. To the builder, this "extra" quality saves construction time and assures an accurate parts fit. To the scale pilot, this same emphasis on quality means that excellent flight characteristics may be expected whether the kit is constructed as a "standoff" or "true scale" model. In short, no matter how you stack the Royal line, the quality still comes out on top – a quality we invite you to inspect first hand, compare for yourself and insist on Royal!

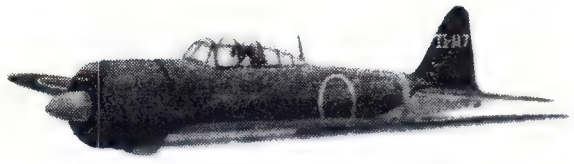


ROYAL
PRODUCTS CORP.
790 W. TENNESSEE DENVER, CO 80223

ROYAL PRODUCTS

Mitsubishi

A6M3 ZERO — .20 SIZE



Engine Size	.19-.35
Wing Span	46.2"
Fuselage Length	35½"
Wing Area	356½ Sq. In.
Scale	1.2" = 1'

Mitsubishi

A6M3 ZERO — .40 SIZE



Engine Size	.40-.50
Wing Span	58 11/16"
Fuselage Length	45 11/16"
Wing Area	577 Sq. In.
Scale	1½" = 1'

Chance Vought

F4U-ID CORSAIR — .40 SIZE



Engine Size	.40-.50
Wing Span	54¼"
Fuselage Length	41¼"
Wing Area	480 Sq. In.
Scale	1¼" = 1'

North American

P-51D MUSTANG — .20 SIZE



Engine Size	.19-.35
Wing Span	46¼"
Fuselage Length	40 5/16"
Wing Area	372 Sq. In.
Scale	1¼" = 1'

CESSNA 172 — .20 SIZE



Engine Size	.19-.35
Wing Span	54¼"
Fuselage Length	40 3/8"
Wing Area	388 Sq. In.
Scale	1½" = 1'

Messerschmitt

ME-109D — .60 SIZE



Engine Size	.60-.80
Wing Span	67.2"
Fuselage Length	58.4"
Wing Area	697 Sq. In.
Scale	2" = 1'

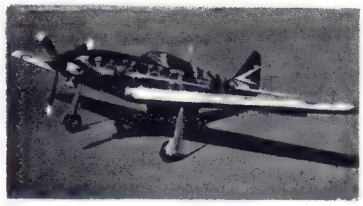
ROY72001	ROYAL A6M3 ZERO (20 SIZE)	55.95	47.55
ROY72002	ROYAL P-51D MUSTANG (20 SIZE)	54.95	46.70
ROY72003	ROYAL CESSNA 172 (20 SIZE)	56.95	48.40
ROY74109	ROYAL ME-109D	94.95	80.95
ROY73003	ROYAL CORSAIR F4U-ID (40 SIZE)	74.95	63.95
ROY73016	ROYAL A6M3 ZERO (40-50)	79.95	67.95

ROYAL PRODUCTS



CESSNA 182 SKYLANE (Junior)

Engine Size 15-.23
Wing Span .....56 In.
Fuselage Length .....40 In.
Wing Area .....405 Sq. In.
Scale Ratio .....1 1/2"=1'



Kawasaki

K1-61 HIEN (Junior)

Engine Size 35-.40
Wing Span .....55 In.
Fuselage Length .....39 3/8 In.
Wing Area .....468 Sq. In.
Scale Ratio .....1 1/3"=1'



Supermarine

SPITFIRE (Junior)

Engine Size 40-.45
Wing Span .....53 5/8 In.
Fuselage Length .....43 1/8 In.
Wing Area .....496 Sq. In.
Scale Ratio .....1 11/24"=1'



PIPER COLT (Junior)

Engine Size 30-.45
Wing Span .....56 11/16 In.
Fuselage Length .....40 11/28 In.
Wing Area .....527 Sq. In.
Scale Ratio .....1 5/16"=1'



BLÉRIOT

Engine Size 35-.40
Wing Span .....51 9/16 In.
Fuselage Length .....47 3/4 In.
Wing Area .....564 Sq. In.
Scale Ratio .....1 7/8"=1'



CESSNA 206 *Skywagon*

Engine Size 49-.60
Wing Span .....73 1/4 In.
Fuselage Length .....56 In.
Wing Area .....654 Sq. In.
Scale Ratio .....2"=1'

ROY72006	ROYAL CESSNA 182 JR. (15-23)	59.95	50.95
ROY73012	ROYAL HEIN JUNIOR (TONY)	59.95	50.95
ROY73018	ROYAL SPITFIRE JUNIOR	54.95	46.95
ROY73022	ROYAL PIPER COLT JUNIOR	54.95	46.95
ROY73023	ROYAL BLERIOT XI	54.95	46.95
ROY74001	ROYAL CESSNA 206	94.95	80.95

ROYAL PRODUCTS



Focke-Wulf

FW-190

Engine Size 60-.80
Wing Span .....60 3/4 In.
Fuselage Length .....51 1/2 In.
Wing Area .....642 Sq. In.
Scale Ratio .....1 3/4"=1'



Chance Vought

F4U-ID CORSAIR

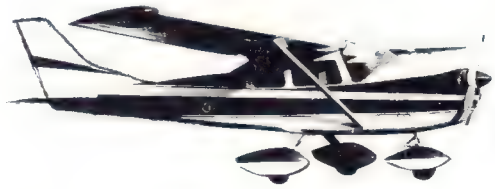
Engine Size 60-.80
Wing Span .....61 1/2 In.
Fuselage Length .....50 3/8 In.
Wing Area .....669 Sq. In.
Scale Ratio .....1 1/2"=1'



McDonnell

F4J PHANTOM

Engine Size 49-.80
Wing Span .....45 In.
Fuselage Length .....45 1/8 In.
Wing Area .....477 Sq. In.
Scale Ratio .....1 1/4"=1'



CESSNA 182 SKYLANE

Engine Size 45-.61
Wing Span .....71 2/3 In.
Fuselage Length .....55 7/16 In.
Wing Area .....700 4/5 Sq. In.
Scale Ratio .....2"=1'



North American

B-25 MITCHELL

Engine Size .....Twin .40-.61
Wing Span .....70 7/8 In.
Fuselage Length .....54 In.
Wing Area .....750 Sq. In.
Scale Ratio .....1 1/8"=1'



P-38 LIGHTNING

Engine Size .....Twin .35-.61
Wing Span .....74 1/4 In.
Fuselage Length .....50 3/4 In.
Wing Area .....695 Sq. In.
Scale Ratio .....1 3/8"=1'

ROY74002	ROYAL FOCKE WULF 190	89.95	76.95
ROY74003	ROYAL CORSAIR F4U-ID (60-80)	94.95	80.95
ROY74004	ROYAL PHANTOM F4J	82.95	70.95
ROY74005	ROYAL CESSNA 182	89.95	76.95
ROY74007	ROYAL B-25 TWIN	99.95	84.95
ROY74008	ROYAL P-38 TWIN	109.95	93.45

ROYAL PRODUCTS



SPIRIT OF ST. LOUIS

Engine Size ..... .45-.61
Wing Span ..... 80 In.
Fuselage Length ..... 49 3/4 In.
Wing Area ..... 958 Sq. In.
Scale Ratio ..... 1 3/4"=1'



PITTS SPECIAL *Little Stinker*

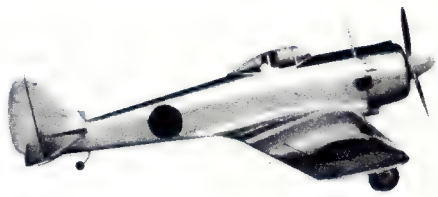
Engine Size ..... .49-.61
Wing Span ..... 51 3/16 In.
Fuselage Length ..... 44 1/4 In.
Wing Area ..... 856 Sq. In.
Scale Ratio ..... 2 7/8"=1'



Kawasaki

K1-61 HIEN

Engine Size ..... .45-.80
Wing Span ..... 68 1/4 In.
Fuselage Length ..... 49 In.
Wing Area ..... 676 Sq. In.
Scale Ratio ..... 1 3/4"=1'



Nakajima

KI-43 OSCAR

Engine Size ..... .50-.80
Wing Span ..... 59 In.
Fuselage Length ..... 48 1/4 In.
Wing Area ..... 613 Sq. In.
Scale Ratio ..... 1 5/8"=1'



CESSNA 310 Q

Engine Size ..... Twin .35-.61
Wing Span ..... 72 7/8 In.
Fuselage Length ..... 52 1/2 In.
Wing Area ..... 725 Sq. In.
Scale Ratio ..... 1 3/4"=1'



Mitsubishi

A6M5 ZERO

Engine Size ..... .60-.80
Wing Span ..... 62 5/8 In.
Fuselage Length ..... 51 7/8 In.
Wing Area ..... 706 Sq. In.
Scale Ratio ..... 1 3/4"=1'

ROY74009	ROYAL SPIRIT OF ST. LOUIS	89.95	76.95
ROY74010	ROYAL PITTS SPECIAL	84.95	72.95
ROY74011	ROYAL HEIN SENIOR (TONY)	94.95	80.95
ROY74013	ROYAL OSCAR (HAYABUSA)	89.95	76.95
ROY74014	ROYAL CESSNA 310 Q (TWIN)	99.95	84.95
ROY74015	ROYAL A6M5 ZERO (60-80)	94.95	80.95

ROYAL PRODUCTS



Supermarine

SPITFIRE

Engine Size ..... .60-.80
Wing Span ..... 64 1/2 In.
Fuselage Length ..... 52 7/8 In.
Wing Area ..... 736 Sq. In.
Scale Ratio ..... 1 3/4"=1'



Sport/Pattern

AQUARIUS

Engine Size ..... .60
Wing Span ..... 67 In.
Fuselage Length ..... 50 In.
Wing Area ..... 720 Sq. In.



PIPER COLT

Engine Size ..... .60-.80
Wing Span ..... 74 13/16 In.
Fuselage Length ..... 53 1/2 In.
Wing Area ..... 946 Sq. In.
Scale Ratio ..... 2 9/16"=1'



CESSNA SKYMASTER

Engine Size: ..... Twin .35-.61
Wing Span ..... 76 1/8 In.
Fuselage Length ..... 58 1/8 In.
Wing Area ..... 754 Sq. In.
Scale Ratio ..... 2"=1'



Grumman

F8F BEARCAT

Engine Size ..... .60-.80
Wing Span ..... 62 3/16 In.
Fuselage Length ..... 48 3/16 In.
Wing Area ..... 652 Sq. In.
Scale Ratio ..... 1 3/4"=1'

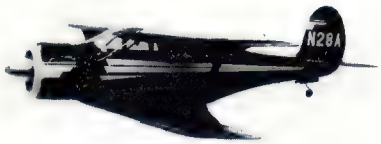


PITTS S-2 *Twin Seat*

Engine Size ..... .60-.80
Wing Span ..... 52 In.
Fuselage Length ..... 49 9/16 In.
Wing Area ..... 830 Sq. In.
Scale Ratio ..... 2.6"=1'

ROY74017	ROYAL SPITFIRE	89.95	76.95
ROY74019	ROYAL AQUARIUS	74.95	63.95
ROY74021	ROYAL PIPER COLT SENIOR	94.95	80.95
ROY74024	ROYAL CESSNA SKYMASTER	99.95	84.95
ROY74025	ROYAL F8F BEARCAT	94.95	80.95
ROY74026	ROYAL S2 PITTS SPECIAL	89.95	76.95

ROYAL PRODUCTS



Beechcraft

STAGGERWING

Engine Size 60-.80
Wing Span .....56 In.
Fuselage Length .....45 5/8 In.
Wing Area .....907 Sq. In.
Scale Ratio .....1 3/4"=1'



Douglas

C-47 SKYTRAIN

Engine Size .....Twin .40-.61
Wing Span .....83 1/8 In.
Fuselage Length .....56 7/8 In.
Wing Area .....767 Sq. In.
Scale Ratio ..... 7/8"=1'



North American

P-51D MUSTANG

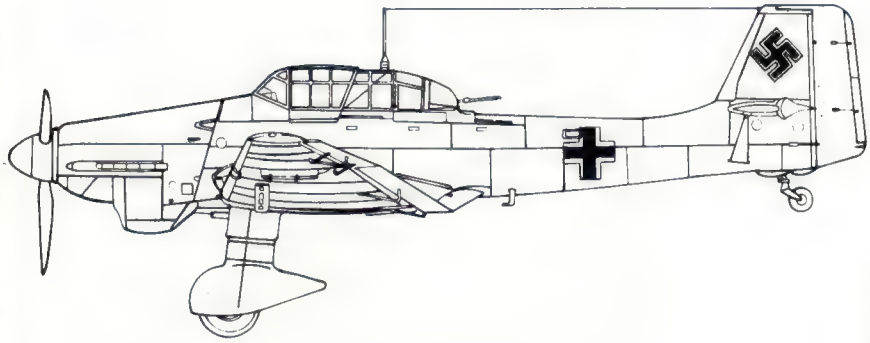
Engine Size 60-.80
Wing Span .....64 3/4 In.
Fuselage Length .....55 3/4 In.
Wing Area .....777 Sq. In.
Scale Ratio ..... 1 3/4"=1'



Partenavia

P68 VICTOR

Engine Size .....Twin .19-.25
Wing Span .....62 7/8 In.
Fuselage Length .....49 1/2 In.
Wing Area .....502 Sq. In.
Scale Ratio ..... 1 3/5"=1'



Junkers

JU 87D-5 STUKA

Engine Size 60-.80
Wing Span .....73 7/8 In.
Fuselage Length .....54 3/4 In.
Wing Area .....723 Sq. In.
Scale Ratio .....1.6"=1'

EASY FLYING SCALE

From Royal

"Royal Scale" goes one step beyond "standoff". Handcraftsmanship with a special emphasis on scale accuracy and detailing sets the Royal line apart from other balsa models. To the builder, this added quality saves time and assures a good parts fit. To the sport flyer this extra margin of quality assures good flying characteristics whether the model is made to standoff or true scale specifications.

ROY74030	ROYAL STAGGERWING BEECH	89.95	76.95
ROY74047	ROYAL DOUGLAS C-47	109.95	93.45
ROY74051	ROYAL P-51D MUSTANG	94.95	80.95
ROY74068	ROYAL TWIN P-68 VICTOR	89.95	76.95
ROY74087	ROYAL JU 87D-5 STUKA	94.95	80.95

RTC MODELS

SPECIALIZING IN READY TO COVER AIRCRAFT

RTC MODELS

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(714) 745-6451

FEATURES
- ★ QUALITY MATERIALS
- ★ HAND CRAFTED
- ★ BALSA & FOAM CONSTRUCTION
- ★ ALL NECESSARY HARDWARE



SPECIFICATIONS

Construction	Balsa W/Foam Wing
Radio	3 To 4 Channel
Engine	29 To 45
Wing Area	555 Sq. In.
Weight (Without Radio)	1¾ Lbs.

Now you can spend your time learning to fly, rather than building. The RTC Trainer requires a minimum amount of time to complete, and you're in the air with a docile, easy to fly, stable airplane, and it is lively enough for the sport flyer too

TRAINER 40

RTC73000 RTC MODELS TRAINER 40 RTC 79.95 71.95

BOB SMITH



SPECIFICATIONS:
- Engine Size ..... .61
- Wing Span ..... 64.75"
- Wing Area .... 679.8 sq. in.
- Root Airfoil 16.5%
- Tip Airfoil 18.5%
- Stab Span ..... 27"
- Stab Area... 168.75 sq. in.

PATRICIA

MASTERS CLASS: AMA/FAI WINNER!

- epoxy-fiberglass fuselage with molded-in vertical fin & molded-in canopy
- precision-cut foam wing & stab (1/64 ply wing/stab covering supplied)
- build it fixed-gear or retractable
- all balsa parts machine cut
- all hardware supplied
- detailed full-size plans (step by step instructions)

SMI74000 BOB SMITH PATRICIA (PATTERN) 109.95 93.95

SOARCRAFT



TWO GREAT SPORT SCALE MODELS for .60 Engines



SPINKS AKROMASTER

Span: 64 in. Area: 580 sq. in.
Engine: .61 Channels: 4
Material: Fiberglass fuselage, foam wing

STEEN SKYBOLT

Wingspan: 49.5 in. Area: 825 sq. in.
Engine: .60 Channels: 4
Material: Fiberglass fuselage, balsa wing

SOR74004 SOARCRAFT SKYBOLT BIPE 99.50 84.65
SOR74005 SOARCRAFT SPINKS AKROMASTER 84.95 72.20

SPICKLER



QUICKIE 200: Span 34¾"; Engine .049-.051
All balsa construction; 2 channels

SPI72200	SPICKLER QUICKIE 200	19.95	16.95
SPI73500	SPICKLER QUICKIE 500 KIT	43.95	34.95

SIG



PIPER CUB J-3

KIT RC-3
ENGINES: .19-.35
WING SPAN 71"



CLIPPED WING CUB

KIT RC-26
ENGINES: .19-.35
WING SPAN: 56"



KIT RC-34
ENGINES: .45-.60
WING SPAN: 51"

SKYBOLT



KIT RC-31
ENGINES: .19-.35
WING SPAN: 57"

KADET



KIT RC-32
ENGINES: .35-.50
WING SPAN: 62"

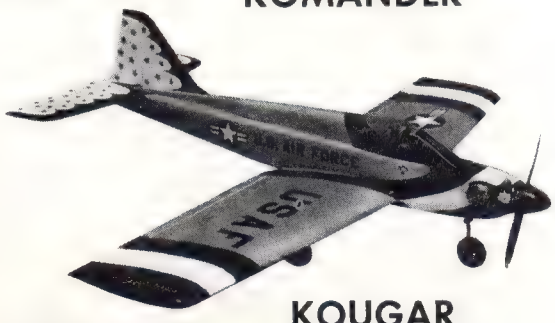
KOMANDER

KIT RC-27 RYAN STA



WING SPAN: 72"
ENGINE: .60

BUILT-UP WING

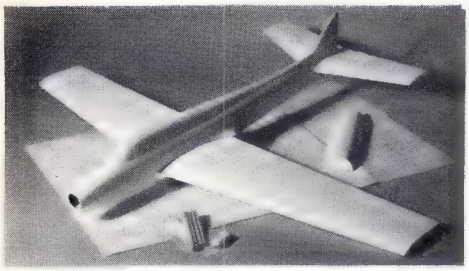


KIT RC-35
ENGINES: .35-.50
WING SPAN: 50-1/2"

KOUGAR

SIG72003	SIG #RC-3 PIPER J-3 CUB	37.95	32.95
SIG72026	SIG #RC-26 CLIPPED WING CUB	37.95	32.95
SIG72031	SIG #RC-31 KADET TRAINER	34.95	29.95
SIG72043	SIG #RC-43 COLT	20.95	18.25
SIG73030	SIG #RC-30 CITABRIA	47.50	41.35
SIG73032	SIG #RC-32 KOMMANDER	39.95	34.75
SIG73035	SIG #RC-35 KOUGAR	44.95	38.95
SIG73038	SIG #RC-38 SMITH MINIPLANE	49.95	42.45
SIG74001	SIG #KBRC1 SUPER CHIPMUNK	59.95	51.95
SIG74004	SIG #KBRC-4 CESSNA 150	69.95	59.95
SIG74027	SIG #RC-27 RYAN STA	73.50	63.95
SIG74029	SIG #RC-29 KOMET (BALSA SKIN)	47.25	40.95
SIG74033	SIG #RC-33 LIBERTY SPORT	64.95	56.50
SIG74034	SIG #RC-34 SKYBOLT	62.50	53.95

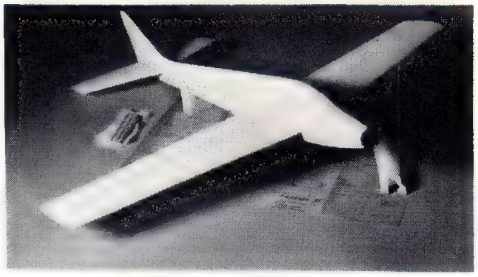
SKYGLAS



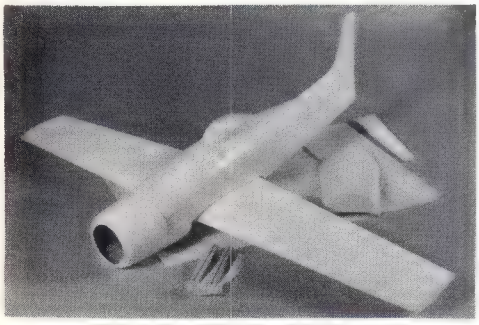
VERTIGO II #SKY74001
Span 65" Engine .60



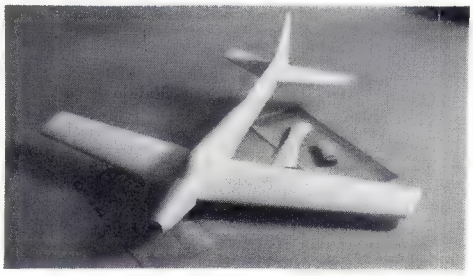
P-47N #SKY74002
Span 62" Engine .60-.80



PHOENIX 6 #SKY74003
Span 63" Engine .60



F8F BEARCAT #SKY74004
Span 64" Engine .60



PHOENIX 5 #SKY73102
Span 55" Engine .40

Sky Glas Kits are fiberglass fuse and foam wing kits of some of the more popular aircraft on the market. Each kit includes fiberglass fuselage with fin molded in place, foam wing and stab cores, dihedral braces, landing gear blocks, and instructions. Beam motor mounts are installed and the engine cutout is provided. Sheeting, hardware, etc. not included.

Skyglass Kits represent the end result of years of development and testing by L. E. Mooneyhan. The Kits give you a highly durable, lightweight, contest-worthy aircraft when completed.

FUSELAGE

The pattern ships average about 20 to 22 ounces weight in the fuselage. When you consider that this fuselage includes a built-on fin the 20 - 22 ounce weight is remarkable. The fuselages are prefinished and only require sanding of the seam. Motor mounts (beam mounts) are installed, standard size spinners fit without modification of the fuselage, and the engine cutout is provided.

WING AND STAB

The wings and stabs are precisely cut from very lightweight foam. The landing gear block design is unique, and absolutely rigid when epoxied in place.

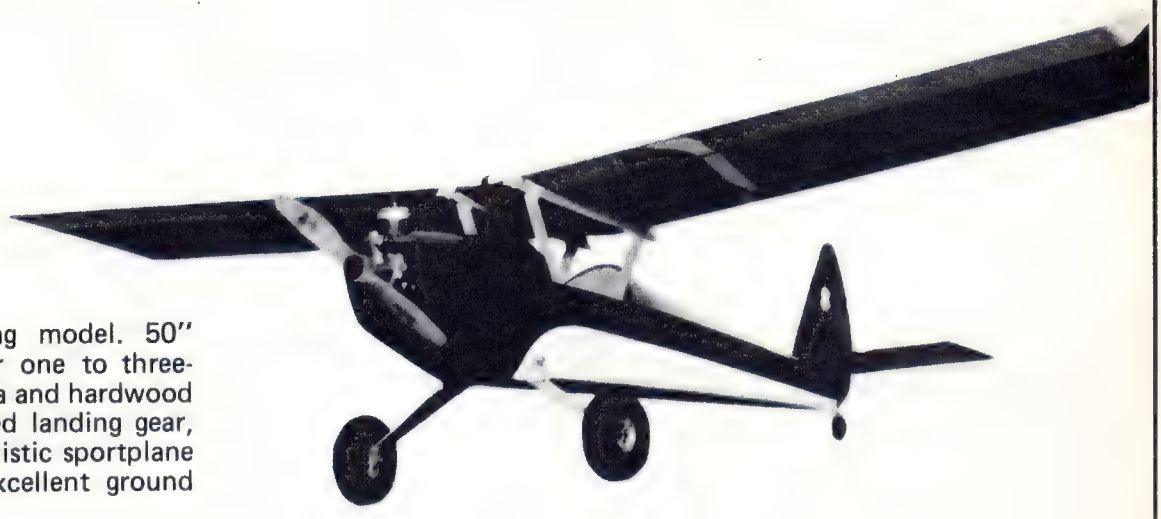
INCLUDED IN EACH KIT:

- *Fiberglass fuselage With Fin In Place*
- *Foam Wing Cores*
- *Foam Stab Cores*
- *Dihedral Braces, Landing Gear Blocks (Low Wing Pattern Ships)*
- *Instructions*

- *QUALITY*
- *QUICK ASSEMBLY*
- *CONTEST PROVEN PERFORMANCE*
- *DURABILITY*
- *MODEST PRICE*

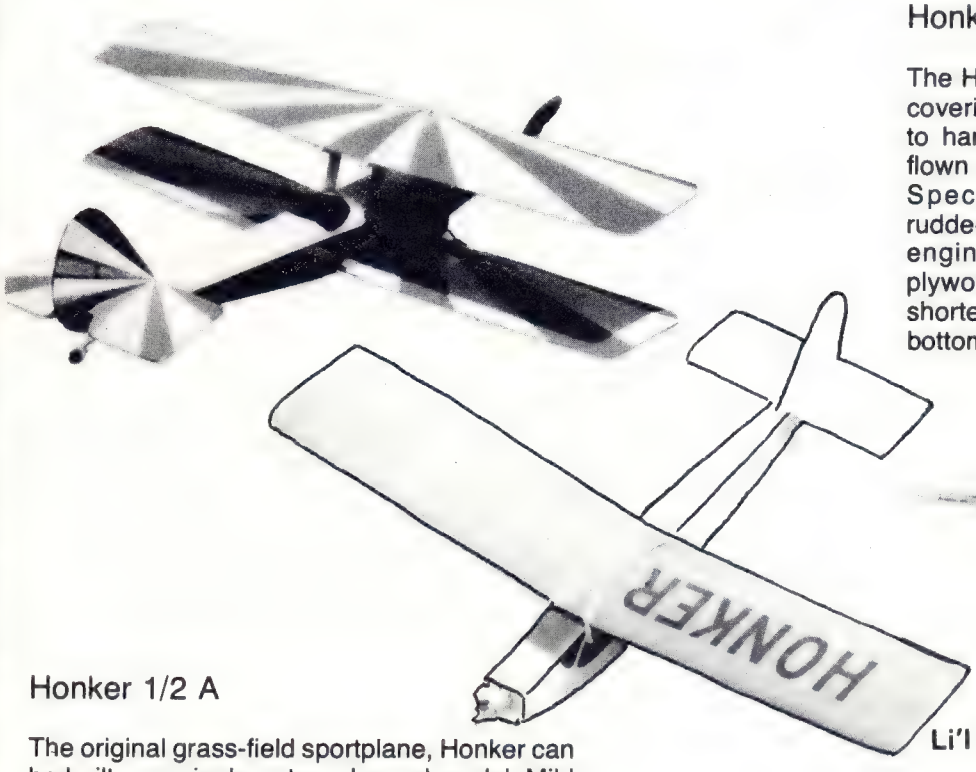
SKY73102	SKYGLAS PHOENIX 5	49.95	35.95
SKY74001	SKYGLAS VERTIGO II	65.00	45.50
SKY74002	SKYGLAS P-47N THUNDERBOLT	65.00	45.50
SKY74003	SKYGLAS PHOENIX 6	65.00	45.50
SKY74004	SKYGLAS F8F BEARCAT	65.00	45.50

SOUTHWESTERN



Gypsy Lady

Our first conventional-wing model. 50" span, 450 sq. in. area, for one to three-channel RC. Machined balsa and hardwood parts, full-size plans, formed landing gear, all hardware. A docile, realistic sportplane for .15 to .29 engines. Excellent ground handling characteristics.



Honker Biplane

The Honker Bipe kit can be finished, ready for covering, in three to four hours. Large enough to handle miniature four channels, it can be flown safely on rudder-only and a gentle .09. Spectacular aerobatic potential using rudder-elevator-motor control with a .19 to .25 engine. Finished wing panels, machined plywood struts and preformed landing gear shorten assembly time. Optional ailerons on bottom wing.

Honker 1/2 A

The original grass-field sportplane, Honker can be built as a single or two channel model. Mild performance on a Babe Bee or similar .049. Probably the fastest kitted Half-A when powered with a Kirncraft Tee Dee. (Not legal for Half-A pylon due to its thin wing section.) Two to three hour assembly time. Can be flown three channel using Cox motor control assembly and Medallion .049. For all miniature proportional radios.



Li'l Gypsy

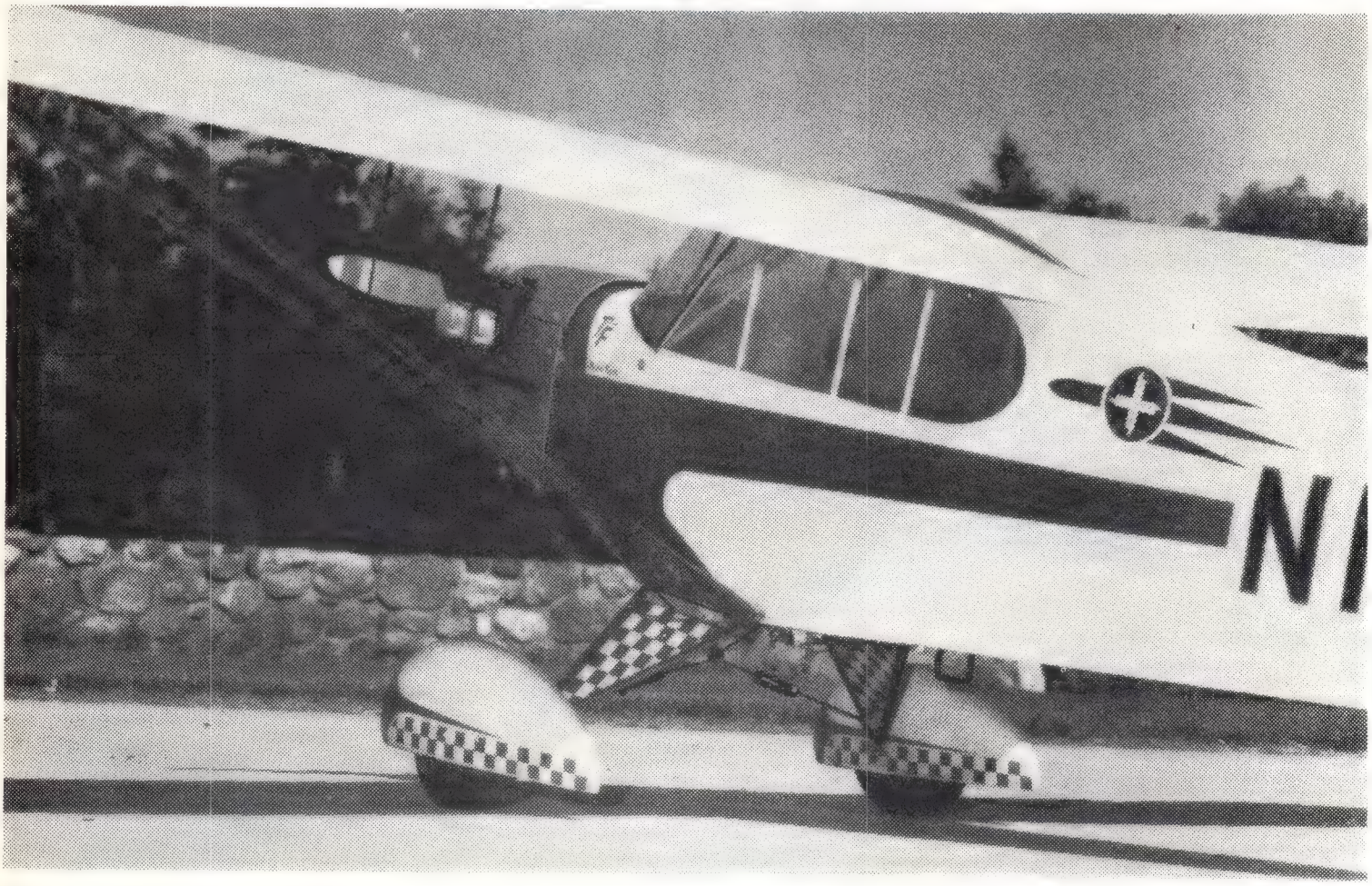
A gentle and realistic flier for .049 engines and one or two-channel radios. Same pre-shaped and hand-sanded balsa wing as Honker and Honker Bipe kits. Kit contains preformed landing gear, shaped and machined balsa and hardwood parts, all hardware and very complete building instructions. 3-4 hour assembly.

SOU72002	SOUTHWESTERN HONKER 1/2A	18.95	14.70
SOU72003	SOUTHWESTERN HONKER BIPE	34.95	26.75
SOU72005	SOUTHWESTERN LI'L GYPSY	20.95	17.25
SOU72006	SOUTHWESTERN GYPSY LADY	35.95	27.50

SPAN AERO

PIPER J-3

8 ft. SPAN



THE BEAUTIFUL CUB

A PROVEN FLYER, THE 8ft. PIPER J-3 CUB. IDEAL FOR STANDOFF SCALE or SPORT FLYING. PLANS SHOW STANDARD MODEL, CLIPPED WING VERSION, AND PA-18 SUPER CUB.

SPECS.

8ft. span standard
80" clipped wing
.60-80 power

Molded fiberglass cabin
molded cowl, Alum. spars
Alum Tips, special solder,
large plans.



SPA74000 SPAN AERO PIPER J-3 8 FT. 124.95 95.95

SOUTHER R/C

NEW!

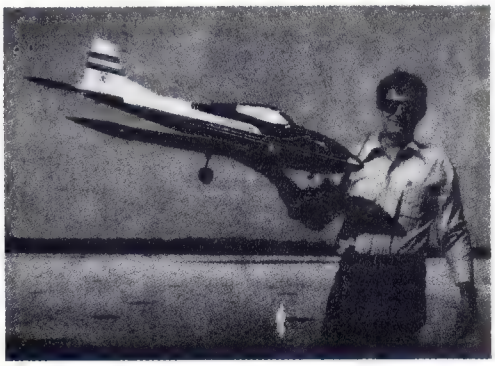
RON CHIDGEY'S

TIGER TAIL III

BY

SOUTHERN R/C PRODUCTS

The Southern Tradition



Designed For Enclosed Tuned Pipe

KIT FEATURES

A. Fiberglass Fuselage with molded in thrust line and firewall reference lines. Molded pipe compartment floor included.
B. Precision cut foam wing and stab cores.
C. Pre-cut plywood parts, ailerons and special hardware.
D. Full size plans and complete instructions.

TIGER TAIL III	
Engine	.61
Wing Span	67"
Wing Area	740 Sq. In.
Length	55"

NEW!

STEVE HELMS'

BOOTLEGGER

BY

SOUTHERN R/C PRODUCTS

The California Concept With A Southern Flair



Designed For Enclosed Tuned Pipe

KIT FEATURES

A. Fiberglass Fuselage with molded in thrust line and firewall reference lines. Molded pipe compartment floor included.
B. Precision cut foam wing and stab cores.
C. Pre-cut plywood parts, ailerons and special hardware.
D. Full size plans and complete instructions.

BOOTLEGGER	
Engine	.61
Wing Span	66"
Wing Area	720 Sq. In.
Length	57"

Build a real winner!



Compensator

Designed and Flown by Rhett Miller

- 4 Time Nats Champ
- 1977 Masters Winner

NEW FIBERGLASS FUSELAGE AND FOAM KIT

The fiberglass fuselage features molded in alignment marks and canopy. Foam wing cores, plus all necessary sheeting and Southern Sorghum contact cement, are included in the kit. Balsa horizontal and vertical stabilizers are provided, with all parts machine cut or sanded to shape. 64" Span, 730 sq. in. Area, 54" Length, .60 Engine

SRC73009	SOUTHERN RC ALLEY KAT	48.50	38.80
SRC74001	SOUTHERN RC TIGERTAIL 3-GLASS	89.95	71.95
SRC74008	SOUTHERN RC COMPENSATOR-GLASS	79.95	63.95
SRC74011	SOUTHERN RC BOOTLEGGER (GLASS)	89.95	71.95
SRC74109	SOUTHERN RC ATLAS (GLASS)	79.95	63.95



ATLAS

'75 WORLD CHAMPION

Designed by Wolfgang Matt, the Atlas is a proud addition to our line of winners. Kit features fiberglass fuselage, w/ molded-in wing and stabilizer incidence marks, formed clear butyrate canopy. 64¾" span, 730 sq. inch area, uses .61 engine.

With its built-up wing, this sport pattern or fun fly design will make an ideal aileron trainer. Yet with .40 engine, is capable of performing Novice and Advanced patterns. 54" span, sq. in. area, .35-.46 engine.

ALLEY KAT



DESIGNED BY ED KECK

STAFFORD

R/C SCALE P51 MUSTANG

NOW!



BIG 600

PATTERN
STANDOFF SCALE
53" SPAN -- 40-60 ENGINES
610 SQ. " AREA FOAM WING
MOLDED COWL & CANOPY

FIXED GEAR

AIRCOUPE



63 SPAN 35- 60 ENGINES
MOLDED COWL - FORMED CANOPY
& GEAR- SCALE 3 VIEW
SELECT PRECUT BALSA & PLYWOOD

P-39 AIRACOBRA



STANDOFF SCALE SPORTSTER
53" SPAN -- 40-60 ENGINES
610 SQ." AREA FOAM WING
MOLDED CANOPY FORMED GEAR

FIXED GEAR-RETRACT INSTALLATION SHOWN

THE LIBERATORS ARE HERE!

AN AUTHENTIC FLYING REPRODUCTION
OF THE B-24D STRAWBERRY BITCH



SPECIFICATIONS
* WING SPAN - 90 INCHES (7½ FEET)
* OVERALL LENGTH, LESS ARMAMENT, 54½ INCHES
* WING AREA - 740 SQUARE INCHES (OVER 5 SQUARE FEET)
* POWER - FOUR 15 TO 25 ENGINES
* SCALE - 13/16 INCHES EQUALS 1 FOOT (1/14.7 FULL SIZE)
* WEIGHT - 9 TO 12 POUNDS DEPENDING ON OPTIONS AND FINISH
* AIRFOILS - AUTHENTIC DAVIS PROGRESSIVE SECTIONS WITH BUILT IN TWIST
* WING LOADING - 32 OZ PER SQUARE FOOT, LESS FLAPS
* BOMB BAY - 275 CUBIC INCHES
* EFFECTIVELY USES A FULL SEVEN CHANNEL RADIO

OPERATIONAL FEATURES
* FULL SCALE FREEZE TYPE CONTROL SURFACES, AUTHENTICALLY HINGED WITH LIGHT-WEIGHT NYLON PIVOTS.
* RETRACTABLE TRICYCLE LANDING GEAR, WITH STEERABLE NOSE WHEEL.
* OPERATING FOWLER FLAPS GENTLY ARC BACK AND DOWN ON UNIQUE TRACKS, TO PROVIDE EFFECTIVE AIRFOIL CHANGE, AND A 10% INCREASE IN WING AREA.
* RETRACTABLE SPERRY BALL TURRET SLAVED TO THE GEAR SYSTEM TO PROVIDE
* NECESSARY LANDING CLEARANCE.
* FOUR ROLLTOP DESK TYPE OPERATING BOMB BAY DOORS COMPLETE WITH CORRUGATIONS.

THE WEEKENDER



SEMI- SCALE
SPORTSTER & RUGGED
BASIC TRAINER

63" SPAN -- 800 SQ. " AREA -- 40-60 ENGINES
FOAM WING PANELS
1/4 SHEET BALSA BOX FUSELAGE

THE TOMKITTY'S

TOMKITTY MK 15

15 to 25 ENGINES SPAN 44"
AREA 350 SQ. IN. WEIGHT 2 TO 3½ LB
FLY IT WITH OR WITHOUT GEAR
BIG BIRD PERFORMANCE ON A
SMALL FUEL BILL





JET AGE STYLING
BUILD IT CHOP NOSE OR SPINNER
SWEPT WING & PROGRESSIVE AIRFOIL
FOR SUPERB HANDLING OVER A
WIDE SPEED RANGE UPRIGHT OR
INVERTED. BASIC BOX FUSELAGE,
SHEET TAIL, SIMPLIFIED WING
CONSTRUCTION, COMPLETE DRAWINGS
INSTRUCTIONS & PHOTO AIDS.
PREMIUM MACHINED BALSA, HARDWOOD
FORMED GEAR, CANOPY & BASIC
HARDWARE PACKAGE.

TOMKITTY MK 40

35 TO 40 ENGINES SPAN 55"
AREA 550 SQ." WEIGHT 4 TO 5½ LBS.
FIXED GEAR, RETRACTS SHOWN
AVAILABLE WITH :
FOAM CORE & BALSA SKINS.

JACK STAFFORD MODELS.

CONSTRUCTION
* SEMI-MONOCOQUE BALSA FUSELAGE USING WRAPPED SHEET AND LOFTED CORNERS FOR QUICK ASSEMBLY AND MINIMUM CARVING ON OUR TIME PROVEN BOX TOP BUILDING JIG.
* NO TEDIOUS HEAVY PLANKING OR BLOCKS TO CARVE AND HOLLOW.
* SCALE LIKE PLYWOOD RING FRAMES IN VISIBLE AREAS.
* COMPOSITE WING DESIGN UTILIZING THE BEST OF FOAM AND BALSA TECHNIQUES FOR THE HI ASPECT RATIO DAVIS WING WITH ITS MANY CUTOUTS.
* RIB AND SHEET COVERED TAIL SURFACES TO FAITHFULLY REPRODUCE THE SCALE AIRFOILS AT A REASONABLE WEIGHT.
* MOLDED COWLS, CANOPYS, TURRETS TO PROVIDE AUTHENTIC CONTOURS WITH MINIMUM EFFORT.

ENGINEERING
* 2½ YEARS OF RESEARCH DESIGN AND TESTING.
* OVER 20 SQUARE FEET OF ENGINEERING DRAWINGS PACKED WITH FULL SIZE COMPONENTS, DETAILS AND VIEWS.
* SEPARATE DETAILED 24X36 SCALE 3 VIEW.
* FULLY ENGINEERED STRUCTURE TO MAXIMIZE LOAD CAPABILITY AT MINIMUM WEIGHT IN A DIFFICULT VIBRATION ENVIRONMENT.
* PERSONALIZED HAND BOOK WITH OVER 350 DETAILED STEP BY STEP INSTRUCTIONS COVERING CONSTRUCTION, PAINTING, ASSEMBLY AND FLYING.
* STEP BY STEP CONSTRUCTION PHOTOS.
* INTERIOR DETAIL DRAWINGS AND PHOTOS.
* EXTERIOR DETAIL PHOTOS AND AUTHENTIC PAINT FORMULAS.



CONTENTS
* 200 PRECUT BALSA, PLYWOOD AND BIRCH DETAILS, FOAMWING CORES WITH PRECUT PUSHROD WAYS.
* 15 SQUARE FEET OF PREMIUM FULL LENGTH BALSA WING AND TAIL SKINS.
* MODIFIED GOLDBERG RETRACTABLE TRICYCLE GEAR.
* 9 MOLDED CLEAR PLASTIC CANOPYS AND TURRETS.
* 4 MOLDED ABS COWLS WITH EXTENDED COWL FLAPS.
* 9 INJECTION MOLDED MACHINE GUN ASSEMBLIES, 11 SEPARATE PIECES EACH INCLUDING HANDLES, MOUNTS, TRIGGERS AND BLAST SHIELDS.
* 4 MOLDED DETAILED TURBO CHARGERS.
* MOLDED STEERING WHEELS AND TURRET SHELL DEFLECTORS.
* MISCELLANEOUS FLAP TRACKS, NYLON TUBING AND BASIC HARDWARE.
* 5 COLOR DECALS INCLUDING CORRECT ERA RED BANDED STARS AND BARS, THE ELUSIVE LADY, HER SIGNATURE AND SQUADRON MARKINGS.

FOUR AIRPLANES WORTH OF MATERIAL, DETAILS, ENGINEERING, INSTRUCTIONS AND ENJOY MENT FOR THE PRICE OF TWO

STAFFORD

R/C SCALE Chipmunk

59 SPAN 40 - 60 ENGINES
MOLDED COWL & PANTS
FORMED CANOPY & MAIN GEAR
FOAM CORE WING



COMANCHE

72 SPAN 49 - 65 ENGINES
MOLDED COWL- FUSELAGE ASSEMBLY JIG
FORMED GEAR SCALE 3 VIEW



SPERRY MESSENGER

44 INCH SPAN 35 - 60 ENGINES FULLY AEROBATIC
MOLDED COWL & DUMMY CYLINDERS - FORMED GEAR - SCALE 3 VIEW



R/C SCALE SUPER BUCCANEER

FROM THE GOLDEN AGE OF AIR RACING THE 1936 SUCCESSOR TO MISS LOS ANGELES -- THE LAST AND BEST OF THE BROWNS

SPAN 43 AREA 305
15 to 23 ENGINES



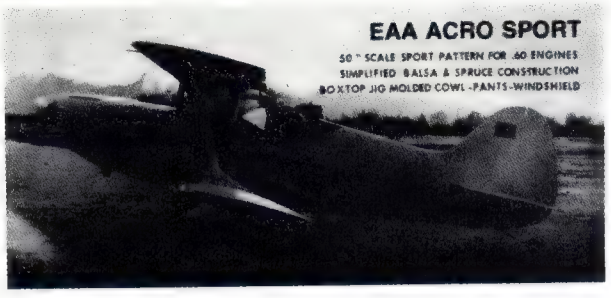
AVAILABLE WITH
FOAM WING FOR QUARTER MIDGET RACING

COMANCHE Twin

72 SPAN 9-1/2 lbs. 50 LENGTH 775 AREA



* FOR TWO 40 ENGINES, MUFFLERS AND SCALE EXHAUST, FULLY COWLED, IN SPACIOUS NACELLES WITH ROOM FOR BIG TANKS.
* COMPLETE SET OF PRECISION MOLDED FITTINGS
* COMPLETE FULL SIZE DRAWINGS, PHOTOS AND INSTRUCTI ONS - INCLUDING *BOTH WING PANELS * FLAP AND RETRACT GEAR INSTALLATION, * FULL SCALE INTERIOR DETAILS



EAA ACRO SPORT

50" SCALE SPORT PATTERN FOR .60 ENGINES
SIMPLIFIED BALSA & SPRUCE CONSTRUCTION
BOXTOP JIG MOLDED COWL -PANTS-WINDSHIELD

EAA ACRO SPORT

A HONEY OF A HIGH PERFORMANCE AIRCRAFT
FOR BIPLANE PATTERN AND STANDOFF SCALE
FOR 40 to 60 ENGINES & 4 CHANNEL R/C GEAR
WING SPAN 50 IN. LENGTH 43 AREA 770 SQ. IN.
DRY WEIGHT 6 TO 7 LBS. SCALE 2-9/16 IN = 1 FT.
COMPLETE DRAWINGS INCLUDING FULL LAYOUT FOR BOTH WINGS
STEP BY STEP INSTRUCTIONS FOR BUILDING AND FINISHING
A FULL PAGE OF PHOTO AIDS DETAILING CONSTRUCTION
FULLY DETAILED ENGINE, MUFFLER & RADIO INSTALLATION
SCALE THREE-VIEW - BOX TOP ASSEMBLY JIG FOR FUSELAGE
INJECTION MOLDED COWL AND WHEEL PANTS FORMED WINDSHIELD
ACCURATE PREFORMED WIRE LANDING GEAR AND CABANE STRUTS
SIMPLIFIED BALSA SPRUCE & PLYWOOD, SHELL FUSELAGE CONSTRUCTION
BOLTED WING INSTALLATION WITH UNIQUE REMOVABLE CABANES
MACHINED & SANDED QUALITY BALSA-BIRCH PLYWOOD AND SPRUCE
WIDE TRACK LANDING GEAR FOR EASY TAKEOFF AND LANDINGS
SCALE FOUR AILERON INSTALLATION FOR PRECISION AIROBATICS
SIDE MOUNTED ENGINE FOR QUICKER STARTS WITH GOOD COOLING
SPACIOUS FUSELAGE FOR LARGE TANKS AND ANY RADIO EQUIPMENT
AVAILABLE WITH BUILT-UP RIBBED OR FOAM WINGS

OUR LINE

The Weekender is our basic trainer and sport flyer, with foam wings and a rugged 1/4 sheet box fuselage. Easy to build with a distintive shape and tough enough to take a lot of hard knocks. It will fly a respectable pattern but like our Aircoupe it will not spin. The Tomkittys are space age styled for the advanced sport flyer and basic pattern work. In two sizes for 15 to 25's and 35 to 50's.

If you want to build scale that really flys well, we have quite a selection. The Comanche is a big model and a real sweetheart. Included are details for optional retract gear installation. The Aircoupe is the easiest flyer we have and handles like its big brother. The Chipmunk has all the acrobatic capabilities of its larger counterpart, it's a kitten with a 40 up front and a real tiger with a 60 aboard. We now have two biplanes with remarkable pattern capability, the Sperry Messenger from the 1920's and the new EAA Acro Sport.

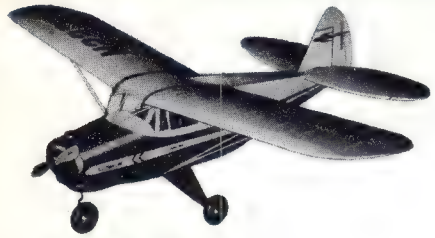
For standoff scale with really superior flying capability, we have the P 51 Mustang and the P 39 Airacobra. The Mustang is available with fixed gear

For quarter Midget we have the P51 Mini Mustang, easily the standard in its class, and now the Super Buccaneer with foam wing for racing or built up wing for sport.

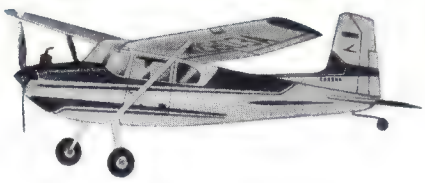
For museum scale, see the Liberator specs and the Comanche Twin.

STA72000	STAFFORD B-24D LIBERATOR	189.95	149.95	74
STA72011	STAFFORD BUCCANEER FOAM WING	39.95	33.95	75
STA72015	STAFFORD TOMKITTY MK-15 BALSA	37.50	31.85	74
STA73040	STAFFORD TOMKITTY MK-40 FOAM	54.95	46.70	74
STA73100	STAFFORD TWIN COMANCHE (BALSA)	139.95	118.95	75
STA74004	STAFFORD P-39 AIRACOBRA (FOAM)	59.95	50.95	74
STA74005	STAFFORD COMANCHE (BALSA WING)	69.95	59.45	75
STA74006	STAFFORD ACRO SPT (FOAM WING)	69.95	59.45	75
STA74007	STAFFORD ACRO SPT (BALSA WING)	64.95	55.20	75
STA74008	STAFFORD CHIPMUNK (FOAM)	59.95	50.95	75
STA74009	STAFFORD AIRCOUPE (BALSA)	69.95	59.45	74
STA74010	STAFFORD WEEKENDER (FOAM)	54.95	46.70	74
STA74011	STAFFORD SPERRY MESSNGER-BALSA	54.95	46.70	75
STA74012	STAFFORD P-51 BIG 600 (FOAM)	59.95	50.95	74

STERLING



Kit FS-1 PIPER TRI-PACER
Wingspan 58¾" Engines .19 to .35



Kit FS-2 CESSNA "180"
Wingspan 45" Engines .09 to .35



Kit FS-3 MAMBO
Wingspan 48" Engines .09 to .35



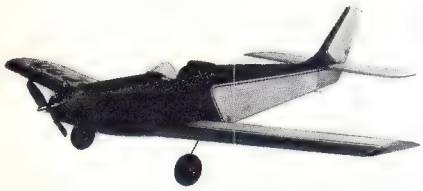
Kit FS-5 FAIRCHILD PT-19
Wingspan 48" Engines .09 to .35



Kit FS-7 WIZARD
Wingspan 54" Enginees .09 to .45



Kit FS-8 PIPER SUPER CRUISER
Wingspan 72" Engines .29 to .60



Kit FS-18 LI'L ROUGHNECK
Wingspan 22½" Engines .010 to .020



Kit FS-20 STEARMAN PT-17
Wingspan 64½" Engines .56 to .70



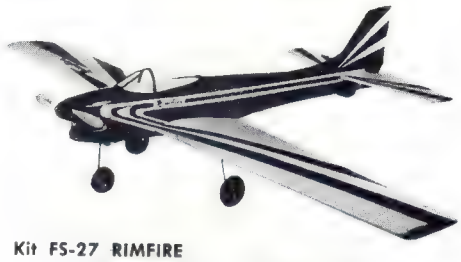
Kit FS-21 FOKKER D-VII
Wingspan 58½" Engines .45 to .70



Kit FS-22 S. E. 5a
Wingspan 40⅜" Engines .19 to .35



Kit FS-25 LANCER
Wingspan 53½" Engines .35 to .51



Kit FS-27 RIMFIRE
Wingspan 54" Engines .29 to .45



Kit FS-29 FLEDGLING
Wingspan 56" Engines .23 to .40



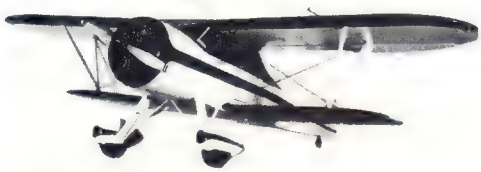
Kit FS-31 CITABRIA
Wingspan 54" Engines .23 to .35



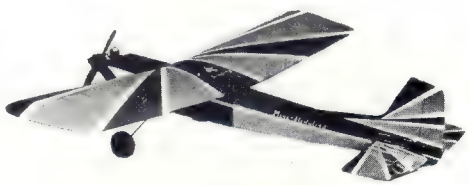
Kit FS-32 GAZARIATOR
Wingspan 68" Engines .50 to .61



Kit FS-33 STINSON RELIANT
Wingspan 57¾" Engines .29 to .40

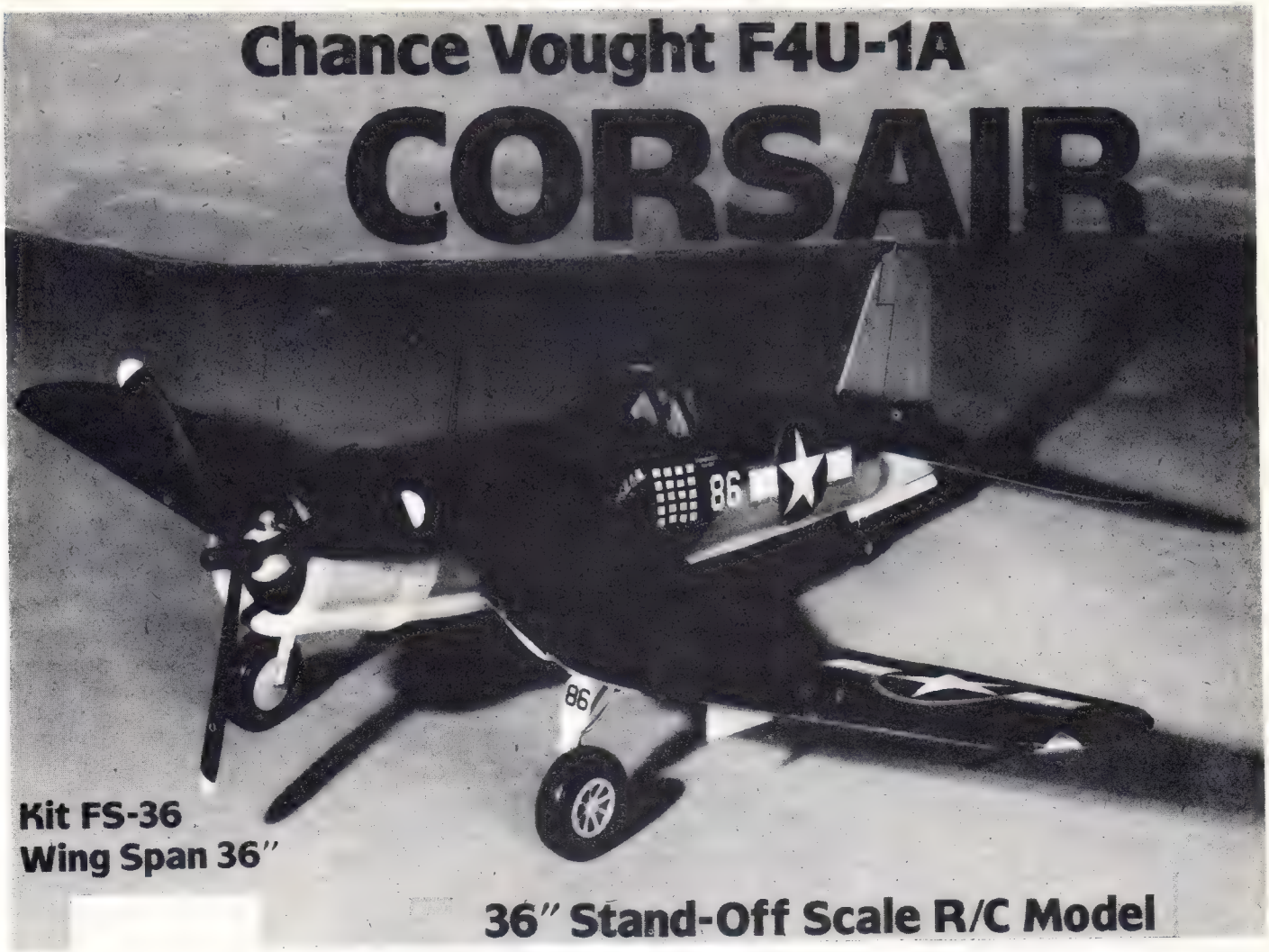


Kit FS-34 WACO S.R.E.
Wingspan 56½" Engines .40 to .60



Kit FS-35 MINI-FLEDGLING
Wingspan 40" Engines .049 to .051

STERLING



About The Airplane:

The prototype XF4U-1 was first flown on March 29, 1940. The Corsair was to become the most important Naval Attack Fighter of W.W. II, and remain in production for 13 years, yet its first service trials had ended in failure in its chosen role. It did not reach maturity as a great fighting machine easily. It gave notice that it was to be flown and tested at all times like a true racing stallion, and was an airplane for inexperienced pilots to reckon with. Because it was an advanced design—and had a new and untried high horsepower engine the Corsair required many perplexing and difficult flight tests and service changes before assuming the role of the Navy's first line fighter.

The Chance Vought Corsair had a service life spanning two wars, performing every conceivable mission possible for a military flying machine. The Corsair had a 15 year life span of battle victories unequaled in the annals of aviation history. Vought ceased production of the F4U-1 Model on Feb. 2, 1945 with the delivery of the 4,996th airplane. In air-to-air combat the Corsair had destroyed 2,140 enemy aircraft with the loss of 189.

The Corsair's distinctive whistling war cry, caused by the wing-root inlets for engine air, earned it the nickname "whistling death" among the Japanese.

The Corsair's most unique feature was the bent (gull) wing which was necessitated by the most powerful engine ever installed in a piston-engined fighter, coupled with one of the largest props in the world. Thus the inverted gull-wing permitted the short, sturdy landing gear required for carrier operations.

The first combat unit to receive the Corsair was VMF-124 and the first 12 machines arrived at Henderson Field on Guadalcanal on Feb. 12, 1943. On Feb. 13, VMF-124 demonstrated their superiority over the Wildcat by escorting PB4Y-1 Liberators all the way to Bougainville. The following day they saw combat for the first time, and the inexperienced Corsair pilots were badly mauled by some 50 Zeros. Two Corsairs, two Liberators, two P-40s and four P-38s were lost in this "Saint Valentine's Day Massacre", but the Corsairs soon gained superiority over the Japanese which was never lost. VMF-124 was subsequently credited with 68 kills against a loss of four aircraft and three pilots. Within six months, all Pacific-based Marine Fighter Squadrons had been re-equipped with the Corsair and the list of aces and the airplanes legend began to grow.

About The Kit:

Designed expressly for 2 channel R/C with plenty of room for just about any R/C up to 4 channel miniature units. Maintaining top quality and simple construction, (even the inverted gull wing), all Balsa and Plywood parts are accurately die-cut, Hardware Package including R/C Hardware, full-size step-by-step Plans and a flat finish Decal sheet for Major Gregory "Pappy" Boyington's Lulubelle as it appeared after the Oct. 17, 1943 raid on Kahili Airfield, Solomons. Recommended engine sizes for maximum performance .09 or .10. Minimal performance achieved with stock .049 or .051 Tee Dee. Diesel conversion of Tee Dee Engines is suggested.

Sterling kits are die cut balsa. Hardware, decals, canopies, etc. are included as needed in all kits.

STE72001	STERLING FS-1 PIPER TRI-PACER	39.95	29.95	76
STE72002	STERLING FS-2 CESSNA 180	24.95	19.95	76
STE72003	STERLING FS-3 MAMBO	21.95	17.55	76
STE72005	STERLING FS-5 FAIRCHILD PT-19	28.95	21.70	76
STE72007	STERLING FS-7 WIZARD	39.95	29.95	76
STE72018	STERLING FS-18 LIL ROUGHNECK	9.95	8.45	76
STE72022	STERLING FS-22 S.E.5A	47.95	35.95	76
STE72029	STERLING FS-29 FLEDGLING	41.95	31.45	76
STE72031	STERLING FS-31 CITABRIA	42.95	32.20	76
STE72035	STERLING FS-35 MINI-FLEDGLING	21.95	17.55	76
STE72036	STERLING FS-36 1/2 A CORSAIR	29.95	23.95	77
STE73025	STERLING FS-25 LANCER	43.95	32.95	76
STE73027	STERLING FS-27 RIMFIRE	46.95	35.20	76
STE74008	STERLING FS-8 PIPER CRUISER	54.95	39.55	76
STE74020	STERLING FS-20 STEARMAN PT-17	89.95	62.95	76
STE74021	STERLING FS-21 FOKKER D-VII	87.95	61.55	76
STE74032	STERLING FS-32 GAZARIATOR	63.95	45.95	76
STE74033	STERLING FS-33 STINSON RELIANT	64.95	46.75	76
STE74034	STERLING FS-34 WACO	72.95	52.50	76

SUREFLITE

semi-scale *Injection Molded All Foam Model*

PIPER J-3 CUB

Kit No. 116



SPAN: 52 inches
AREA: 442 sq.in.
ENGINE: .15 — .19
RADIO: 2-3-4 channel

FEATURES:
- Vacuum Formed Semi-Scale Engine Cylinders
- Pushrods and Firewall Factory Installed
- One Piece Semi-Scale Foam Molded Wing & One Piece Factory Joined Fuselage
- Interlocking Stabilizer and Rudder For Perfect Alignment
- Complete Hardware Package Including; Hinges, Nuts & Bolts
- Comes With Vinyl "N" Numbers, "Lightning Stripe" and Cub Insignia Decals
- Steerable Tailwheel Mounting Hardware, and Heavy Duty Semi-Scale Aluminum Landing Gear

Ideal Trainer
Lightweight
Quick Final Assembly
Easy For Anyone To Fly

SURE FLITE PRODUCTS
the little aircraft company

USN/USAF JET ATTACK BOMBER

LTV
A-7 CORSAIR II

FOR .10 POWERED FLIGHT OR SLOPE SOARING



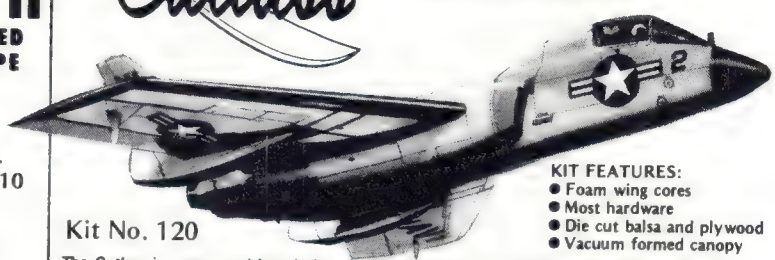
SPAN: 37 in.
AREA: 260 sq.in.
ENGINE: .051 - .10
RADIO : 2 ch.

Kit No. 119

- MOLDED FUSELAGE SHELL
- FOAM WING CORES
- DIE CUT BALSA AND PLYWOOD PARTS
- MOST HARDWARE
- FOR TEN POWERED FLIGHT OR SLOPE SOARING

Chance-Vought F7U
Cutlass

BALSA WOOD KIT
FOR .10 POWERED FLIGHT OR SLOPE SOARING



KIT FEATURES:
- Foam wing cores
- Most hardware
- Die cut balsa and plywood
- Vacuum formed canopy

Kit No. 120

The Cutlass is a very exciting airplane both with power or on the slope! On the slope or with power nothing will out roll this airplane, and in fact most of the people will be dazzled by its quick speed on the slope and pull their models down and watch this one. Construction is basically balsa fuselage with planked foam wing core construction. We doubt that you have ever handled a model that will perform as this one does!

SPAN: 34 inch POWER: .051 - .10
AREA: 220 sq.in. RADIO: 2 channel

INJECTION MOLDED ALL FOAM
EASY TO ASSEMBLE KIT

½A PIPER J-3 CUB



Ideal Trainer
Lightweight
Quick Final Assembly
Easy For Anyone To Fly

SPAN: 42 in.
AREA: 250 sq.in.
ENGINE: .049 - .051
RADIO: 2 ch.

Kit No. 124

J-3 ALL FOAM KIT .....
J-3 ARF WITH TESTORS .049 ENGINE ALREADY INSTALLED PLUS TIRES; HINGED

Kit No. 111

1/2-A high performance BABY BIRDIE



SPAN: 36 inch
AREA: 198 sq.in.
ENGINE: .049 - .051
RADIO: 2 channel
WEIGHT: 21 oz.
FUNCTIONS: elevator & aileron

- FAST HIGH PERFORMANCE 1/2 A
- DIE CUT BALSA AND HARDWOOD PARTS
- BUILT UP WINGS
- STRONG YET EASY CONSTRUCTION
- FULL SIZE PLANS & INSTRUCTIONS

SUREFLITE

½-A A.R.F.
BABY BIRDIE
Almost Ready To Fly

BRAND NEW



Kit No. 118

COMPACT MODEL THAT IS FAST, MANEUVERABLE, AND YET HAS ENOUGH WING AREA FOR STABILITY

Wing:
Foam core hand covered with white vinyl plastic, vacuum formed center section, ailerons covered, plywood tip skids. ALL YOU DO is join the wing halves, hinge on the ailerons and install the wing servo.

Fuselage:
Beautiful vacuum formed complete with built-up inner plywood superstructure, firewall mounted and ready for instant motor mount (included) installation. ALL YOU DO is cement the stab and rudder into place and add the radio & install the engine.

Stab & Fin:
Balsa stab, elevator, rudder and fin all hand covered with film. ALL YOU DO is hinge the surfaces and attach them to the fuselage.

SPECIFICATIONS:
SPAN – 42 inch
AREA – 242 sq. in.
ENGINE – .049 - .051
RADIO – 2 channel
HARDWARE – Motor mount, horns, hinges, keepers & pushrod stock

PIPER
J-3 CUB *Stand-Off Scale*



Kit No. 106

- 48" WING SPAN
- .10 - .15 DISPLACEMENT
- 348□" WING AREA

Features: Die-cut balsa, full size plans, pre-formed landing gear, hardware, and plywood firewall.

INJECTION MOLDED ALL FOAM

CESSNA SKYLANE 182

Semi Scale

SPAN: 53"
AREA: 420sq.in.
POWER: .15 — .19 IDEAL
RADIO: 2 to 4 CHANNELS
WEIGHT: 50oz. (With 3 chassel)



Kit No. 109

- Beautiful All-Foam Molded Parts
- One Piece Molded Fuselage, Factory Joined
- Pushrods Factory Installed
- Firewall Installed
- Motor Mount Installed on Firewall
- Pre-Bent Wire Landing Gear

AERONCA 7AC CHAMPION



Kit No. 107
SPAN: 48 inch
AREA: 405 sq.in.
ENGINE: .10 - .15
RADIO: 2 - 3 channel

SEE NEXT PAGE FOR ALL SURE-FLITE PRICES AND STOCK NUMBERS PLUS TWO BRAND NEW RELEASES.

SUREFLITE

BENNY HOWARD'S DGA-3 "PETE"

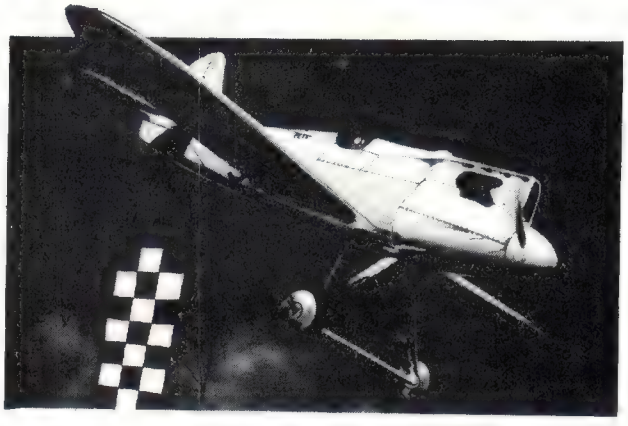
INJECTION MOLDED ALL FOAM KIT

A classic 1930's racer

SURE FLITE PRODUCTS
the little aircraft company



Photo of actual model.



SURE FLITE PRODUCTS
the little aircraft company

GREAT .10 POWERED CLUB RACER!

Span: 36 inches
Engine: .051 - .10
Area: 250 sq.inches
Radio: 2 channel

FEATURES

● Injection molded all foam fuselage, wings and stab ● Vacuum formed cowl ● Aluminum landing gear ● Decals ● Basic hardware ● Pushrod material ● Complete instruction book ●

KIT NO. 123

SURE FLITE PRODUCTS
the little aircraft company

Supermarine SPITFIRE

INJECTION MOLDED ALL FOAM



EASY TO ASSEMBLE KIT

— FEATURES —

● All foam fuselage, wing and stabilizer ● Molded clear canopy ● Molded exhausts and radiators ● Complete decal sheet and color notes ● All hardware included ● Bent wire landing gear ●

KIT NO. 122

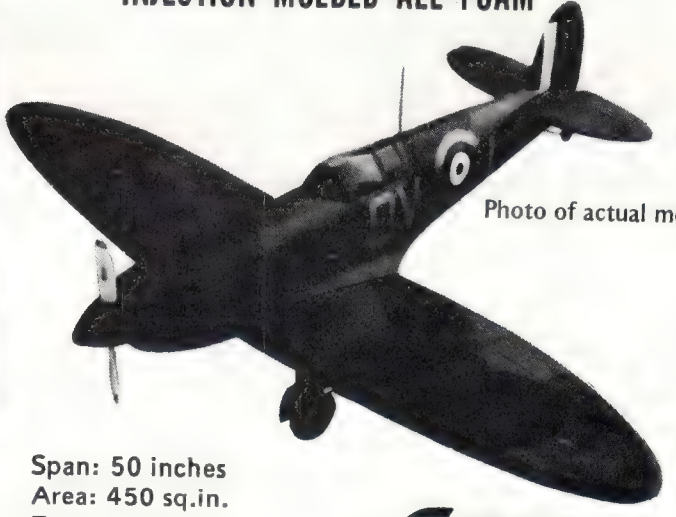


Photo of actual model.

Span: 50 inches
Area: 450 sq.in.
Engine: .29 - .40
Radio: 4 channel

SURE FLITE PRODUCTS
the little aircraft company

SUR72106	SUREFLITE 106 BALSA CUB J-3	24.95	18.75	79	SUR72120	SUREFLITE 120 CUTLASS	24.95	18.75	78
SUR72107	SUREFLITE 107 CHAMPION	27.95	22.50	79	SUR72123	SUREFLITE 123 DGA-3 PETE-FOAM	24.95	18.75	80
SUR72108	SUREFLITE 109 SKYLANE 182	37.95	28.50	79	SUR72124	SUREFLITE 124 1/2A J-3 (FOAM)	24.95	18.75	78
SUR72109	SUREFLITE 111 BABY BIRDY	19.95	15.95	78	SUR72125	SUREFLITE 1/2A J-3 ARF W/049	49.95	37.50	78
SUR72114	SUREFLITE 116 ALL FOAM J3 CUB	37.95	28.50	78	SUR73118	SUREFLITE 118 BABY BIRDIE ARF	49.95	37.50	79
SUR72119	SUREFLITE 119 A-7 CORSAIR-FOAM	29.95	22.50	78	SUR73122	SUREFLITE 122 SPITFIRE-FOAM	37.95	28.50	80

TOP FLITE

LOOK what's taking off!



NEW! P-47D THUNDERBOLT
Span: 60" Eng: .50 to .60 Kit RC-19

Top Flite's NEW P47-D Thunderbolt R/C · Stand-off Scale

Span: 60"
Length: 48"

Area: 720 Sq. In.
Engine: 50 to 60

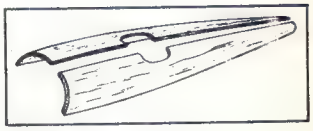
It's here at last—World War II's favorite fighter aircraft. Affectionately dubbed the "JUG" by American fighter pilots, the P47-D Thunderbolt proudly joins Top Flite's squadron of stand-off scales.

Just like our P51, P40 and P39, the new P47-D combines the appearance of a true scale model with the fly-ability and building ease of a sport R/C.

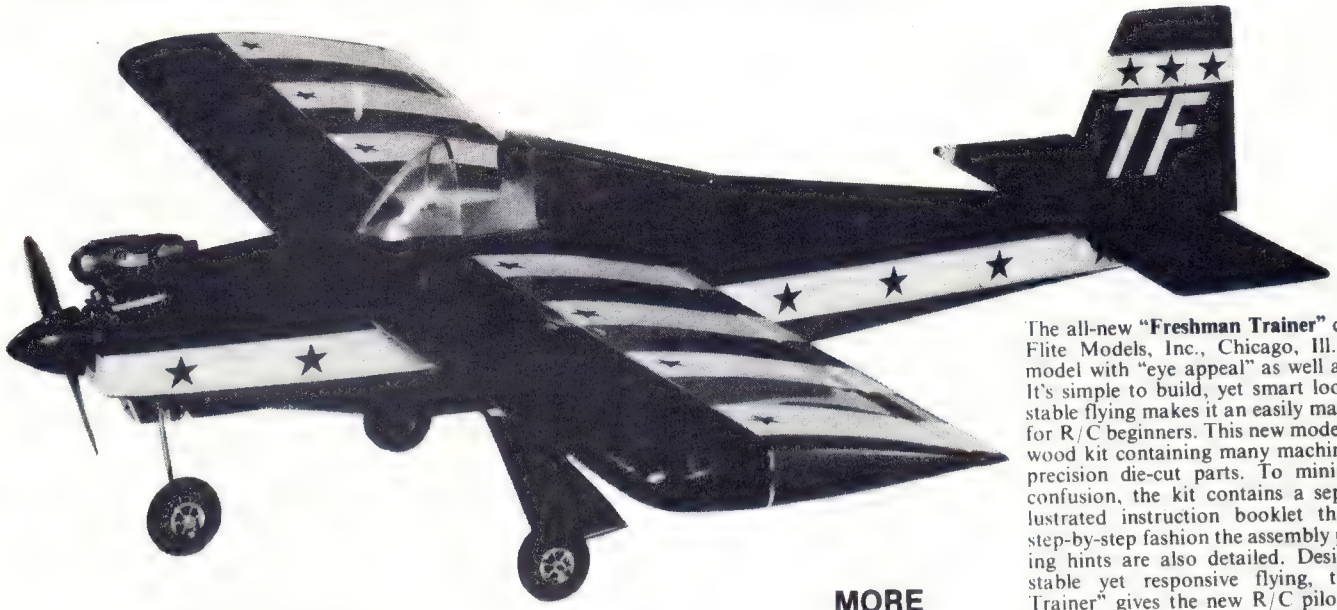
And, just like the original "JUG", our stand-off scale version has already built a pretty impressive performance record at the 1974 Nationals with the highest flying scale score, and first place at the Chicago Scalemasters contest.

So, drop by your dealer for the new P47-D today, then watch the "JUG" live up to its incredible reputation.

EXCLUSIVE Formed Balsa Fuselage Shells



ALL BALSA KIT features: Machine-Shaped Parts, Tough Injection-Molded Cowl, Authentic Matte Finish Mylar Monokote Markings, Plus Many More Time Saving Features.



TOP72004	TOP FLITE RC-4 TAURT TRAINER	34.95	27.95	83
TOP72010	TOP FLITE RC-10 TOP DAWG	21.50	16.25	83
TOP72011	TOP FLITE RC-11 HEADMASTER	25.50	17.95	83
TOP73014	TOP FLITE RC-14 NOBLER	38.50	30.75	83
TOP73020	TOP FLITE RC-20 FRESHMAN TRNR.	44.95	33.70	81
TOP74007	TOP FLITE RC-7 TAURUS	53.95	40.50	83
TOP74012	TOP FLITE RC-12 KWIK-FLI III	59.95	44.95	83
TOP74013	TOP FLITE RC-13 SE5A	59.95	44.95	83
TOP74015	TOP FLITE RC-15 CONTENDER	45.95	34.45	83
TOP74016	TOP FLITE RC-16 P-51B MUSTANG	57.95	43.50	82
TOP74017	TOP FLITE RC-17 P-40 WARHAWK	59.95	44.95	82
TOP74018	TOP FLITE RC-18 P-39 AIRACOBRA	59.95	44.95	82
TOP74019	TOP FLITE RC-19 P-47D THUNDBLT	79.95	59.95	81
TOP77016	TOP FLITE CONVERSION KITP-51D	8.95	8.50	82

MORE TOP FLITE KITS ON THE NEXT TWO PAGES

The all-new **"Freshman Trainer"** created by Top Flite Models, Inc., Chicago, Ill., offers a fine model with "eye appeal" as well as "fly appeal." It's simple to build, yet smart looking. Its slow, stable flying makes it an easily manageable plane for R/C beginners. This new model is an all-balsa wood kit containing many machine-finished and precision die-cut parts. To minimize neophyte confusion, the kit contains a separate, fully illustrated instruction booklet that explains in step-by-step fashion the assembly procedure. Flying hints are also detailed. Designed for slow, stable yet responsive flying, the "Freshman Trainer" gives the new R/C pilot time to think and react while guiding it in flight. Two years of design and testing have gone into making this "forgiving" yet good-looking trainer.

The model features shaped leading and trailing edges, ailerons, stab and elevator, solid wood wing tips, formed landing gear and steerable nose gear, one-quarter inch five-ply fire wall, shaped rock-hard maple engine mounts and all required hardware, such as nuts, screws, nylon horns, wing bolts, hinges, steering arm, mounting bearings, etc. The "Freshman Trainer" can be flown from a small field with either three-or four-channel radios. with appropriate ready-to-fly weight of 3 pounds.
(Kit RC-20)

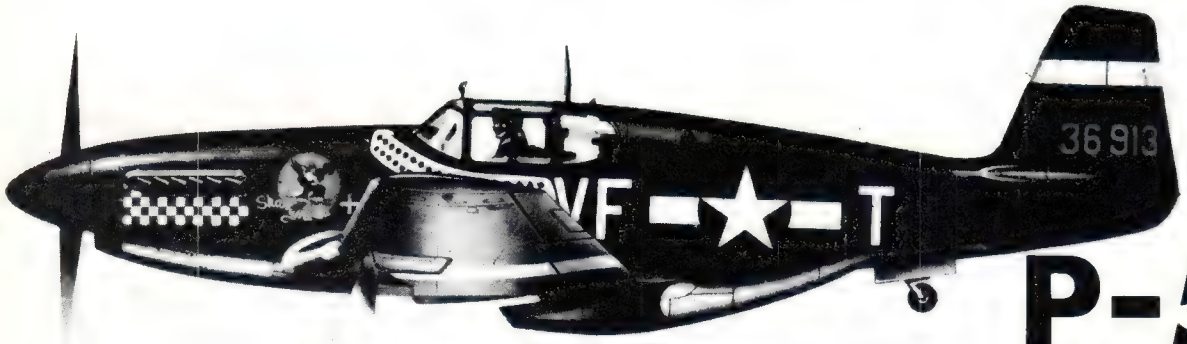
TOP FLITE

Standoff Scale is the newest and most exciting thing on the R/C scene! By subtle design, these models achieve truly excellent flying qualities, equal to sport or pattern R/C types, *at no expense to the scale appearance.*

Add to this, standard uncomplicated structural design, and it's easy to see why modelers every where have accepted this Dave Platt-designed series as "the only way to fly!"

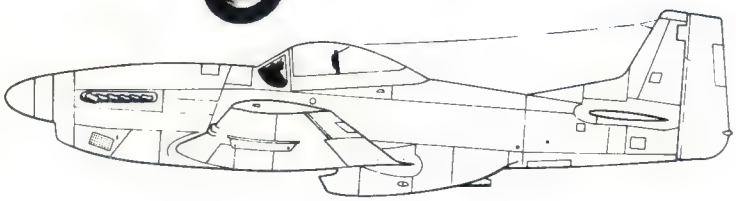
All kits feature balsa construction for strength and durability, and contain accurately machined & diecut wood parts, complete nylon and metal fittings, large full-color fuelproof decals, full-size plans and clear building instructions. Alternative color schemes are provided, all fully authenticated. Warhawk & 'Cobra feature plastic cowls; all kits have super-quality clear cockpit canopies.

SPECS (ALL MODELS): Span: 60", Area 600 sq. ins.; for .40 to .60 engines & 4 to 6 channel equipment.



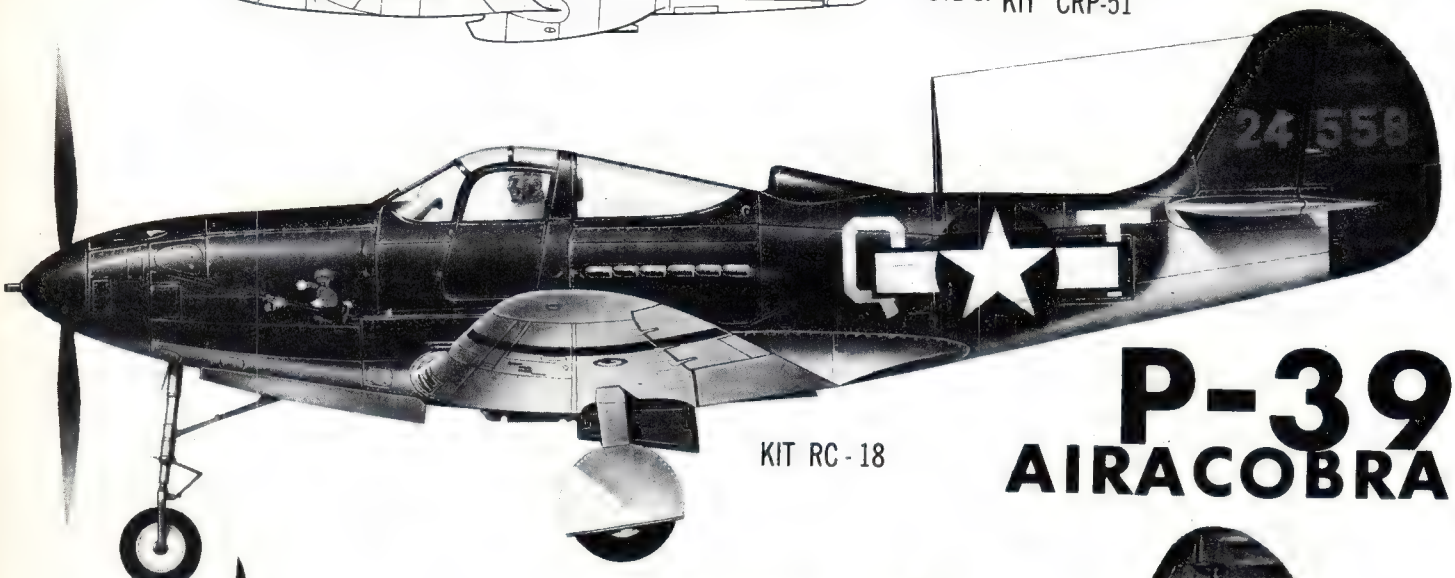
P-51B MUSTANG

KIT RC-16



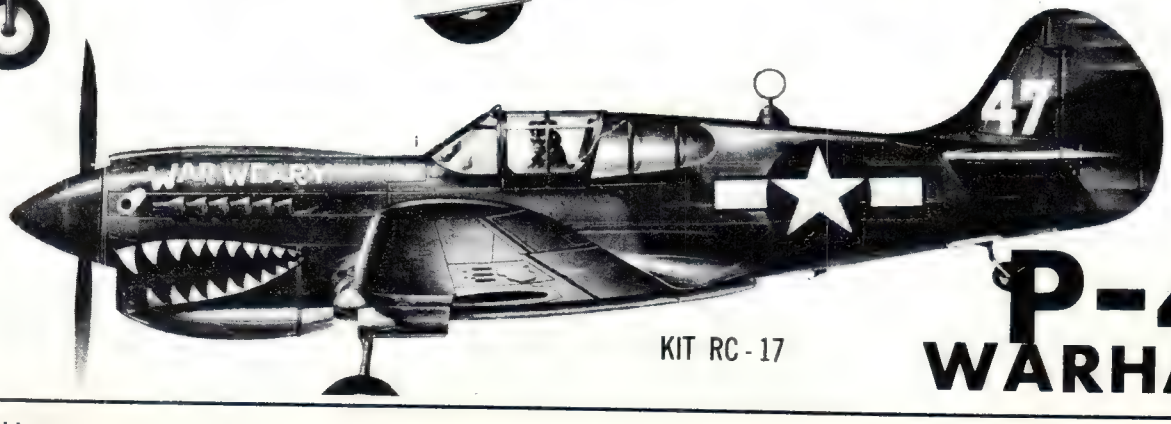
CONVERSION KIT FOR P-51D

Converts standard P-51B Mustang Kit into the bubble-hood D-version. Kit contains canopy, all necessary wood parts including turtledeck and new fin, full instructions and yet more color schemes for P-51D's! KIT CRP-51



P-39 AIRACOBRA

KIT RC - 18



P-40 WARHAWK

KIT RC - 17

TOP FLITE

S.E.5a

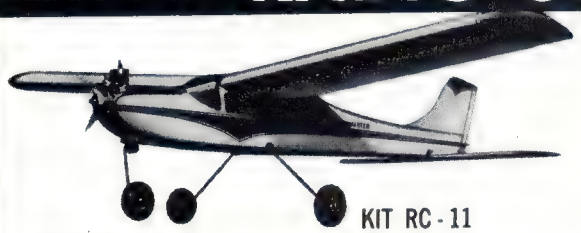


Never before has an R/C scale model been designed with such measurable accuracy from the wing dihedral and tail area to the most minute incidences. Dave Platt, Scale R/C Champion, and designer of the Dauntless, the only scale model ever given a perfect scale score at any NATS (1968), has outdone himself in designing this S.E.5a.
Yet, with all this attention to detail and scale, the S.E.5a combines a ruggedness and flying-field performance seldom found in any model.

Wing span: 53"
Wing Area: 1060 Sq. In.
Engines: .45 to .60
Kit RC-13

- Nylon strut fittings solve the biplane problem of alignment and assembly
- Machined air foil section wing struts
- Stamped metal cowls
- Scale display prop-blank . . . cut to shape
- 2 full sized waxed plan sheets (including both wings)
- 2 gigantic fuel proof authentic matte finish decal sheets
- Plus the finest quality balsa, nylon and metal parts and fittings money can buy

RADIO CONTROL TRAINERS



KIT RC-11

HEADMASTER

America's best high-wing introduction to R/C! Gentle and predictable to fly; easy to build and rugged enough to take knocks. For .09—.35 engines & 1—3 channels, 48" span. Unique fuselage jig for easy no mistake construction included.

TAURI

Another fine trainer, this one is for larger engines .15—.45 and comes with ailerons for full 4-channel control operation a (long time) proven favorite.

KIT RC-4



Can Be Assembled in 8 Hours



CONTENDER KIT RC-15

Most unique low-wing that is as easy to fly as any high-wing. Ideal as a transition-ship, between basic trainers and scale/pattern models etc., this design is virtually stall-proof! For .40—.60 power, 650 sq. ins. in compact 54" span.

R/C SPORT & COMPETITION MODELS

NOBLER



With combined elevator and flap control

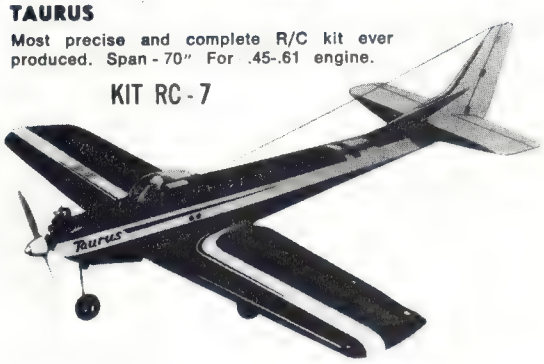
Wing span: 51 in.
Engine: .35 to .45

KIT RC-14

TAURUS

Most precise and complete R/C kit ever produced. Span-70" For .45-.61 engine.

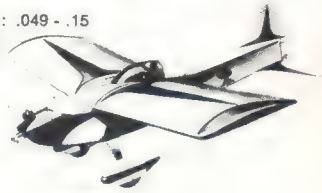
KIT RC-7

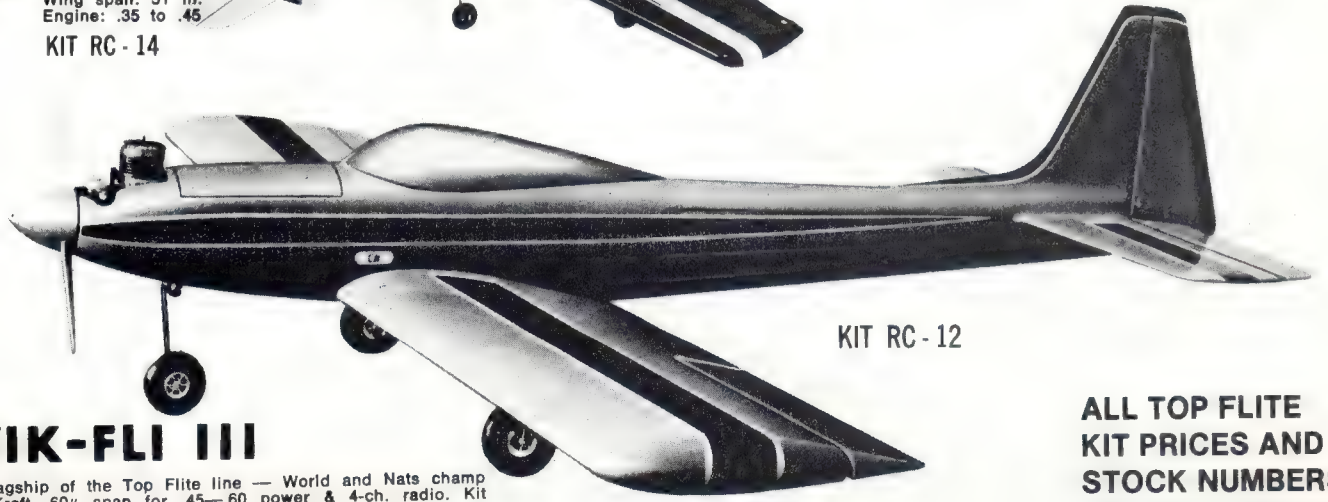


TOP DAWG — 1/4 Midget Pylon Racer

Realistic and ultra-rugged model for sport or pylon racing. Single to three-channel R/C.
Span: 40" Eng: .049-.15

KIT RC-10





KIT RC-12

KWIK-FLI III

Contest flagship of the Top Flite line — World and Nats champ by Phil Kraft. 60" span for .45—.60 power & 4-ch. radio. Kit includes wing jig.

ALL TOP FLITE KIT PRICES AND STOCK NUMBERS ARE ON PAGE 81.

VK MODELS

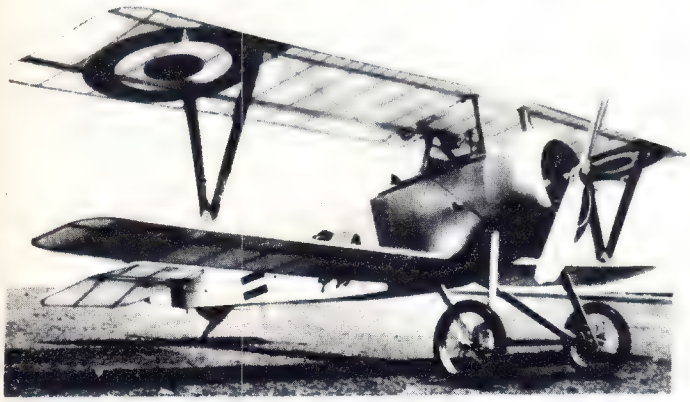
... EXCELLENCE

PROVEN WINNERS IN THEIR FIELD

METICULOUSLY ENGINEERED

FOR STRENGTH & PERFORMANCE

NIEUPORT "17"

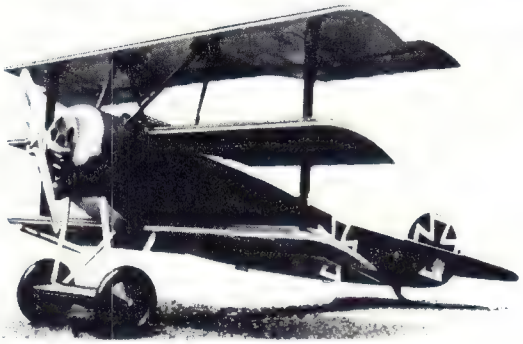


3 GIANT FULL SIZE PLAN SHEETS INCLUDING ISOMETRIC VIEWS BUILDING INSTRUCTIONS SHOWING METHOD OF EQUIPMENT INSTALLATION FOR EASY BALANCE
FINISHED COWL
FINISHED HARDWOOD LEADING & TRAILING EDGES
SPRUCE LONGERONS & SPARS
MACHINED WOOD PARTS
DIE CUT PLY. BULKHEADS, BALSA WING RIBS. ETC.
DIE STAMPED LANDING GEAR SHOCK PLATES
NYLON RUDDER, ELEVATOR & AILERON BELLCRANKS
ALUMINUM TORQUE RODS
BRACKETS, ETC.
FLYING WIRE MATERIAL

SCALE 2" 1'
WINGSPAN 54"
WGT. 5½ LBS.
DESIGNED FOR .60 ENGINES

AUTHENTIC 5 COLOR SOUIX INSIGNIA DECALS

FOKKER TRIPLANE



Detailed Full Size Plans — Building Instructions
Formed Cowl — Formed Wing Fairing
Machined and Die - Cut Wood Parts
Utilization of Harwood for Strength
Hardware Full Size Decals
SCALE: 2" = 1' SPAN: 47"
WEIGHT: 5¼ lbs. ENGINE: .60
IT'S LIGHT! — IT'S RIGHT!

SOPWITH CAMEL



GIANT FULL SIZE PLAN SHEETS INCLUDING ISOMETRIC VIEWS, BUILDING INSTRUCTIONS SHOWING METHOD OF EQUIPMENT INSTALLATION FOR EASY BALANCE. FINISHED HARDWOOD LEADING & TRAILING EDGES
SPRUCE LONGERONS & SPARS
MACHINED WOOD PARTS, DIE CUT PLY BULKHEADS, BALSA WING RIBS.
NYLON AILERON BELLCRANKS
BRACKETS, ETC.

SCALE 2" 1'
SPAN 56"
ENG. .60
WGT. 6 LBS.

FORMED COWL — FORMED FAIRING
FULL SIZE DECALS

VK MODELS

CHEROKEE BABE

THE REALLY BIG LITTLE AIRPLANE

FAST ASSEMBLY

Designed for intermediate and small size proportional radios.

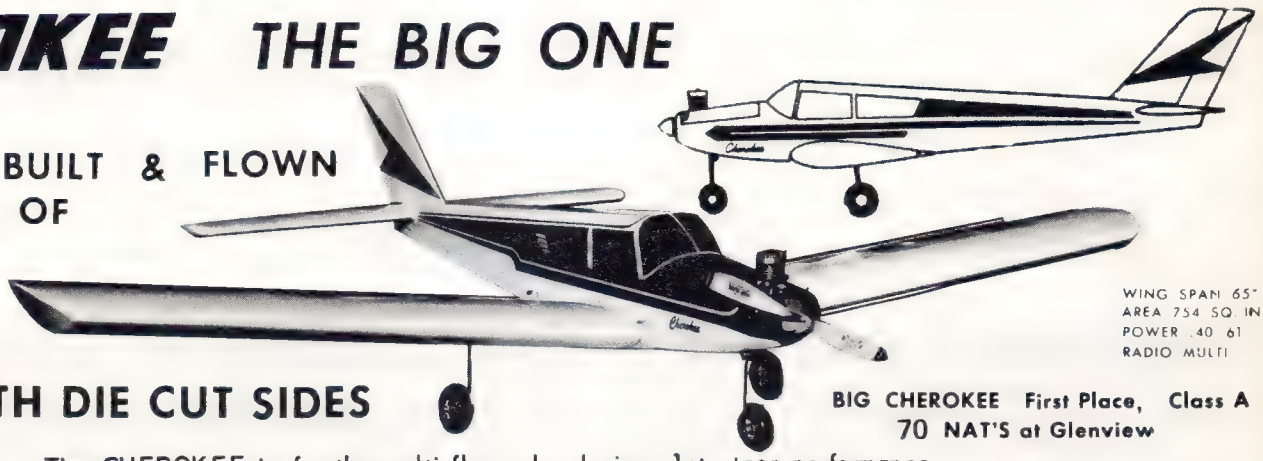


Formed Plastic Cowl and Windshield.
Steerable Nose Gear.
Full Span Tapered Ailerons, Elevator and Rudder.
Includes Wire Parts and Nylon Hardware.
Hardwood Spars.
Symmetrical Built-up Stab.

Span 53 in.
Airfoil 18% Symmetrical
Radio Multi-channel
Recommended engines
.40

CHEROKEE THE BIG ONE

THOUSANDS BUILT & FLOWN
A FAVORITE OF
MANY



WING SPAN 65"
AREA 754 SQ. IN
POWER .40 61
RADIO MULTI

FuLL LENGTH DIE CUT SIDES

BIG CHEROKEE First Place, Class A
70 NAT'S at Glenview

The CHEROKEE is for the multi-flyer who desires 1st class performance with a realistic, semi-scale model. This low wing beauty is designed around an 18% symmetrical airfoil that allows effortless take offs and slower landing approaches without danger of stalling.

CORBEN "SUPER ACE"

The Corben is the first in our New Era line of models. These will be models of airplanes that were prominent during the Twenties and Thirties. It is basically 2" = 1' (Eyeball) scale. Flight characteristics are extremely good with a .40 engine. This model will perform the full stunt pattern. We believe this is an ideal model for the modeler who wants to get into scale with a minimum of work.

RECAPTURE THE THRILL OF THE 30'S, THAT CLASSIC ERA OF AMERICAN AVIATION

Span 56 in.
Area 505 sq. in.
Engines - .35 - .46

FORMED COWL
DURAL GEAR
DECALS



CORBEN

VKK73003	VK CHEROKEE BABE	38.95	30.20	85
VKK73004	VK SUPER CORBEN	44.95	34.80	85
VKK74001	VK CHEROKEE	67.95	52.65	85
VKK74005	VK FOKKER TRIPLANE	67.95	52.65	84
VKK74006	VK NIEUPORT 17	67.95	52.65	84
VKK74007	VK SOPWITH CAMEL	67.95	52.65	84

Fun To Build

TOWER HOBBIES

INTRODUCING THE

MAN TRAINER 40

the perfect trainer, designed by
JERSEY JIM MARTIN

#TOW73040



A trainer is a very special type of airplane. It must be extremely stable, yet very maneuverable. It must be rugged, yet not overweight. And it must be designed for the beginner, yet it must be capable of more advanced flight as the beginning pilot progresses.

The MAN Trainer 40 has all of these excellent characteristics. And a whole lot more! The design incorporates the many years of modelling and competition experience of its world famous designer, Jersey Jim Martin.

This outstanding kit features all balsa construction, detailed instructions, full size rolled plans, precision cut and sanded parts, full accessories, and fast, easy construction design.

Place your order today. Send your order in by mail, or call Toll Free for immediate COD shipment.

SPECIFICATIONS

Wing Span	52 inches
Wing Area	.546 sq. in.
Weight	4½ to 5½ lbs.
Power	.25 to .49
Material	All balsa
Radio	4 channel

TOW73040	TOWER M.A.N. TRAINER 40	49.95	39.95
TOW75040	TOWER WING KIT MAN TRAINER 40	23.95	18.95
TOW76040	TOWER FUSE KIT MAN TRAINER 40	29.95	24.25

WING MFG. CO.

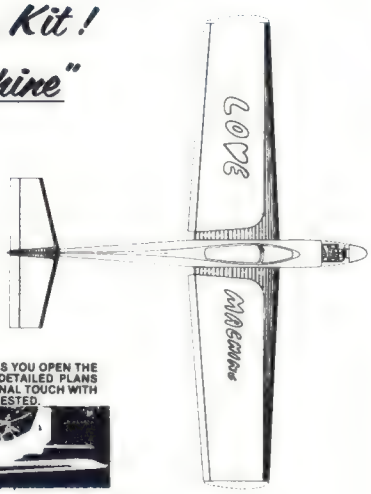
Complete quality Kit !

The "LOVE machine"

Area 550 sq. in.
Weight 4-1/2#

Engine .29 to .50

Span 55 ins.



QUALITY IS IMMEDIATELY APPARENT AS SOON AS YOU OPEN THE BOX. GOES TOGETHER FAST AND EASY WITH DETAILED PLANS THAT WON'T FRUSTRATE YOU. ADD YOUR PERSONAL TOUCH WITH THE VARIOUS CUSTOMIZING TECHNIQUES SUGGESTED.



THE "LOVE MACHINE" IS GOOD LOOKING ON THE GROUND AND IN THE AIR. IT HAS MAGNIFICENT FLIGHT PERFORMANCE. IF YOU ARE AN R/C SPORT FLYER YOU WILL LOVE THIS OUTSTANDING AIRCRAFT. THE KIT COMES WITH PRE-CUT BALSA AND PLYWOOD FUSELAGE PARTS, COMPLETE HARDWARE PACKAGE INCLUDING ENGINE MOUNT, FORMED LANDING GEARS, STEP-BY-STEP PLANS, DECALS, FOAM WING CORES (STRONG & EASY TO BUILD), DETAILED CRYSTAL CLEAR CANOPY WITH COCKPIT INSERT, SPINNER AND MUCH MORE.

4 CHANNEL
RADIO CONTROL.

WING

WING MFG., BOX 33
CRYSTAL LAKE, IL 60014
CALL 815/459-0417



YOUR PRACTICE PLANE

PRACTICE THOSE HARD MANEUVERS. THIS SHIP DOES THEM & IS VERY FORGIVING.

no. 402

Complete Kit

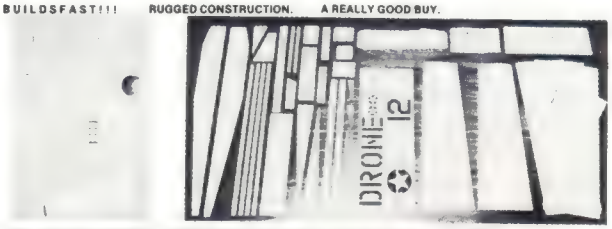
Buy a "DRONE"



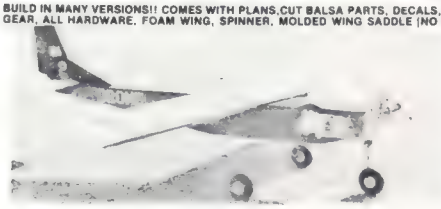
WHAT MAKES THE DRONE SO EASY TO FLY?

IT HAS BEEN PROVEN THAT A SHOULDER WING AIRCRAFT HAS OUTSTANDING STABILITY. IF YOU COUPLE THIS WITH A SLIGHTLY TAPERED WING, A LITTLE INCIDENCE AND A SEMI-SYMMETRICAL AIRFOIL WITH A HIGHER TIP PERCENTAGE THAN THE ROOT, YOU WILL HAVE AN EXTREMELY GROOVY AIRPLANE. ALL THESE CHARACTERISTICS HAVE BEEN ENGINEERED INTO THE DRONE. THE FOAM CORED WING FITS INTO A MOULDED SADDLE WHICH GIVES JUST THE RIGHT ALIGNMENT. THE BALSA FUSE GOES TOGETHER FAST WITH A STRAIGHT FORWARD TAIL SECTION INCLUDING A DORSAL FOR EXTRA SMOOTH PERFORMANCE. AN OUTSTANDINGLY COMPLETE KIT.

BUILDS FAST!!! RUGGED CONSTRUCTION. A REALLY GOOD BUY.



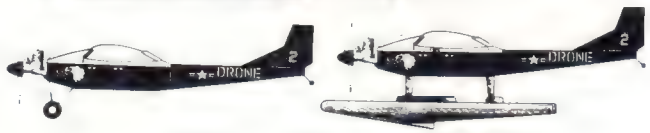
BUILD IN MANY VERSIONS!! COMES WITH PLANS, CUT BALSA PARTS, DECALS, LANDING GEAR, ALL HARDWARE, FOAM WING, SPINNER, MOLDED WING SADDLE (NO CARVING)



SPECIFICATIONS:

55" SPAN
525 SQ. IN.
3½ TO 4½ LBS. FLYING
.29 TO .50 ENGINES

ITEM #401



WING MFG. BOX 33 CRYSTAL LAKE, ILLINOIS 60014

WIN72001	WING DRONE AIRPLANE KIT	49.95	35.95
WIN73402	WING THE LOVE MACHINE	49.95	35.95

WIN75001	WING FOAM WING DRONE	10.95	9.75
WIN75002	WING FOAM WING LOVE MACHINE	10.95	9.75

WES CRAFT

B-17 Flying Fortress

This 1/10 scale model dominates anything near it - both on the ground and in the air. The massive elegance of the real thing comes alive in this outstanding model as its four engines thunder down the runway. The flight characteristics are very stable and super smooth. Landings are gentle and predictable, even with one or two engines out. The kit is impressive: two big boxes that are full of monsterous sub-assemblies and fuse lage sections. It is a highly prefabricated model that will impress you in every respect - it is unquestionably the ultimate in R/C modeling.

This kit is manufactured by Wes Craft Mfg. of Calif. It is available from them at the retail price with 2-3 week wait, or from Tower at a discount and immediate delivery.



- ★ **Stand off scale**
- ★ **Weight 16 lbs.**
- ★ **Wing Span 10'**
- ★ **Five Channel**
- ★ **Power four 30's and up**
- ★ **Flying site assembly is quick and simple**

KIT INCLUDES

- ★ **All glass fuselage, wing cells, and engine cowlings**
- ★ **Detachable three sectional foam core wing**
- ★ **Detachable horizontal and vertical foam core stabs**
- ★ **Complete balsa sheeting for wing and stabs**
- ★ **Pre-formed plastic canopys and gun turrets**
- ★ **Heavy duty landing gear**

Note: Due to the size of the two cartons this kit comes in we require a $100.00 deposit for C.O.D. orders.

WST74000	WESCRAFT B-17 FLYING FORTRESS	495.00	399.95

WORLD

WOR72009	WORLD J-3 CUB	39.95	33.95
WOR72010	WORLD AERONCA CHAMP	39.95	33.95
WOR73100	WORLD MR. MULLIGAN	47.95	40.95

EXHIB'AIR



MITSUBISHI MU-2L

Wingspan: 49½" Fuse length: 40" Engines: twin .20's
Weight: 6½ lbs. ready-to-fly Requires 5 channel radio
Stand-off-scale

EXH72000	EXHIB'AIR MITSUBISHI MU-2L	199.95	179.95

ABOUT THIS MODEL:

This stand-off-scale model of the Mitsubishi MU-2L features a white fiberglass gel-coated fuselage and engine nacelles, a built up balsa wing with 1/16" balsa wing wheeting included, a ¼" solid balsa sheet stab and fin, all necessary accessories and hardware, a scale nose gear, very detailed and complete blueprints, and a complete instruction booklet that has factory information included.

This very complete kit makes a beautiful display or scale flying model. As a flying model it is definitely in the high performance category and it is recommended for the advanced R/C pilot only. In the hands of a qualified pilot it is truly a magnificent airplane.

ABOUT EXHIB'AIR:

Exhib'air makes the Fairchild F-27 (page 32) and this model. Both are absolutely the finest quality workmanship in the industry. These are limited production super high quality models. For the modeler who demands absolutely the finest.

POWER KITS (continued from page 11)

What kind of trainer should I get?

Even though we have mentioned, in general, how to select a trainer earlier in this section, this is still the question we get asked more than any other. The trainer is just about the most important airplane you'll ever own. It is the one that will allow you to get into the air, and learn how to fly planes safely and competently.

Whenever we get asked about our recommendation, there is one we really think that outshines all the others. This one is the Tower Hobbies M.A.N. Trainer .40. We recommend this plane not just because it is sold under our name, but because it has all of the characteristics we believe should be in a trainer. It is a stable, gentle-handling aircraft that responds well to the controls. Add to this rugged construction, excellent parts, and economical price, and you have a plane that can't be beat.

The radio choice should be made with care also. Again, we believe that the best buy in a radio considering such things as price, quality, reliability, and servo power is the Tower Six-channel system. See the radio section for details on this sytem.

For your engine, we selected the K&B .40. This engine consistently outsells its nearest competitor . . . any competitor. Why? It is a reliable, easy to operate, rugged and inexpensive engine. Since it's made in the U.S. you can get repair parts any time you need them.

Our bird was covered in Top Flite Super Monokote, and trimmed with Trim Monokote. The fuel tank is a Sullivan CSS-8. Wheels, hinges, throttle cable, wheel collars, and engine mounting bolts were all from Du-Bro Products, although any other brand would have worked as well. (See Accessory section).

The Main pushrods for the elevator and rudder were made from the Du-Bro Kwik-Rod sets. These are excellent pushrod systems. The Aileron links were simply Du-Bro 12" Kwik-links.

That's how we did *our* bird, and it's one we recommend to anybody who wants an excellent plane for their first time out. It's excellent for the student and expert, alike, as it can be set up for either taste, and be a gentle cub, or a wild Lion if you would like it to be.
For some help, buy the Flight Training Course in our Books section (Page 187). It is an excellent source of information for the novice.

ADHESIVES (continued from page 177)

Epoxies will bond to almost anything, except some plastics, and produce a permanent, strong bond. Their set time is long enough to allow positioning of the parts into their proper relationships. They are also impervious to the ravages of the nitromethane in our fuels. One thing to remember, though . . . epoxy glues are heavy, and their use should be rationed carefully, even though the model could be assembled faster with a short-cure epoxy, it will be lighter if you use another type of glue for all of the construction except for the high-stress joints.

The joints that require epoxy are not very large in number, but very essential in their strength. They are firewall-to-fuselage, wing-center joints, landing gear blocks, horizontal and vertical tail surfaces. Epoxy is also excellent for using to fuel-proof the fuel tank compartment, the engine compartment, and for bonding the center-section fiberglas cloth strapping on some wings. (Devcon, Hobbypoxy, GMP, Southern R/C)

"White" glues: The "white" glues, as they are called by modelers, include the regular casein-based glues such as Elmer's, and Wilhold "Glubird" white glue, and the aliphatic resin types, such as: Titebond, and Wilhold Aliphatic resin glue. Primarily, the aliphatic resin types are used in modelling as they offer superior strength and better moisture-proofing than the standard "white" glues.

These glues are designed primarily for bonding wood to wood. Because wood absorbs moisture very rapidly, you need a glue that can take advantage of this feature, especially since balsa wood is especially porous. Since these glues work best on wood, offer a very strong bond, and are non-toxic, with no offensive smell, they are recommended for use in all of your general construction. The time need for the glue to cure is a small price to pay when you are giving yourself the best possible chance for your model to stay together. Some people using the cyanoacrylates have been using them to join the pieces together, and then using a white glue to "reinforce" the joint are really just wasting their time. You'll still have to wait for the glue to dry . . . use the "hot" glues to tack the pieces in place, to eliminate some clamping.

Do not use these glues for laminations, because the water in the Glue will be absorbed by the wood, and will cause it to curl. You *can* use this for laminations, but you'll have to clamp every part of the pieces to be joined, and then you may still get a finished assembly that is warped. (Titebond, Wilhold).

Contact cements: Contact cements are adhesives designed for bonding pieces in laminated structures. In use, the glue is applied to both surfaces to be joined, and allowed to dry. When the glue is dry, the pieces are pressed together. Even though the adhesive is dry, the glued areas bond on contact . . . hence the name.

Once stuck, though, you cannot move the joined parts if you've gotten them misaligned. You must make sure that the pieces are carefully aligned before you put them together. Note, though, that some contact cements will attack some substances — see the instructions for details.

Contact cements are quite strong, but only if they can be used over a large area. This makes them excellent for lamination, but terrible for almost any other joint. Many people have used contact cement while applying sheeting to built-up, wood wings. *DON'T!* You are sacrificing a tremendous amount of strength just to save a little time. The small area of each rib is insufficient for a good bond . . . use a stronger glue: epoxy, cyanoacrylate, or "white" glue. (Goldberg "Blue Goo", Southern R/C "Sorghum," Wilhold spray adhesive).

Silicon adhesives: These are adhesives that have been around for quite some time. It is basically an air-curing silicon rubber. Due to the nature of its substance, it can be used for a tremendous number of tasks. It can be pigmented, and comes in a variety of colors. In fact, if you get it in white, it is usually called, "Silicon Rubber Bathtub Caulk." Clear, it's called "RTV" for radio-television use (as insulation and shock-absorbing use). Its best applications are for holding nylon pushrods in place (Nyrods, Gold-N-Rods, Kwik-Rods), throttle cables, for sealing wing joints, holding servo rails in place, and various other holding or sealing tasks.

While it is by no means the strongest adhesive available, it will adhere to almost anything, including nylon and polyethylene. As you use it, you'll find a myriad of tasks it can do . . . in cluding caulking around your bathtub! (Devcon Silicon Adhesive).

Types of Joints and Glues to Make Them

Wood-To-Wood: All Kinds
Metal-To-Wood: Epoxy
Metal-To-Metal: Epoxy (it must be supported with cloth or wire wrapping—solder is best).
Foam-To-Foam: Epoxy, "white" glue, contact cement (where applicable).
Wood-To-Foam: Epoxy, "white" glue, contact cement (where applicable).
Laminations: Contact cement, (best choice), white glues, epoxy (be careful to use sparingly, it's heavy).
Plastics: Epoxy, contact cement

.... another 1st for TOWER HOBBIES CUSTOMERS!

THE ACCESSORY COMPLETION GUIDE

No longer do you have to wait for your kit so that you can determine which hardware items you need. Just look up that information right here. This is an organized listing of all the accessories you need, but are not included with the kit. This accessory completion guide is a service we are pleased to bring to you. Tower Hobbies is, to our knowledge, the first and only R/C mail-order house to offer this service to you, the modeler. Another reason why Tower Hobbies is the leader in the industry!

GENERAL NOTE: All R/C kits, with few exceptions, require the following materials: wing seating tape, throttle cable, (also used for nose-wheel steering), pushrods, (either balsa or Nyrods), glue, epoxy, some kind of covering or finishing material (Monokote, Solarfilm, Coverite, or silk), fuel tubing, trim, and, of course, knives, sand paper, T-pins and other building accessories.

In this tabulation, we have made no reference to specific products. Instead, we have listed the products generically, since there are several manufacturers for each item. Please note that this guide is to assist you in selecting the parts you require. These parts are not already picked and packaged into "kits," or "packs." You, the modeler, must decide which items you need, and incorporate them into your order.

OTHER NOTES: All pattern aircraft kits come equipped with fixed landing gear, but retracts are easily installed, and are usually found on such aircraft. Also, most multiengine and scale aircraft will also accept retracts.

DEFINITIONS OF HEADINGS

SPINNERS — Propeller spinner. The letter indicates the size of the spinner. Refer to the code chart for the size of spinner this letter represents. The accompanying number designates the number of spinners required.

FUEL TANK — The number shown designates the size of the required fuel tank in fluid ounces. If a number in parentheses is also present, this number represents the number of fuel tanks required in the aircraft.

ENGINE MOUNT — The number shown tells you how many engine mounts you will need for the kit. The size mount you choose will be determined by your choice of engine for that kit.

MAIN WHEELS — These are the wheels needed for the main gear on the plane. The letter represents the size needed by the plane. See code chart. The number along with the letter shows how many wheels of that particular size are needed.

NOSE OR TAIL WHEEL — Same as above, except that the wheel is for the nose or tailwheel position.

FLEXIBLE CABLE — The number of flexible cables needed is shown by a number in this position.

CONTROL LINKS — The number of long, heavy-duty pushrods needed, usually for the rudder and elevator (1 each). These can be of any type — wood, nylon, etc. They have a clevis at one end, at least.

AILERON LINKS — This term describes the short pushrod usually used on ailerons. They consist of a clevis and a short wire rod.

MAIN COLLARS — The wheel collars needed to retain the main wheels. The letter designates size, and the number shows how many collars are needed. Refer to the code chart below for the meaning of the letter.

NOSE OR TAIL COLLARS — The wheel collars used to retain the nose or tail wheel. The code is the same as above.

HINGES — The number shown is the number of individual hinges required by this particular aircraft.

ENGINE MOUNTING BOLTS — This will be shown by a number, or by a number with another number in parentheses. The number not in parentheses represents the size of mounting bolts. The number in parentheses represents the number of sets of *four* mounting bolts and nuts. If no number is in parentheses, just one set of four bolt and nuts of the size is needed.

RUBBER BANDS — The number shown is the particular size of rubber bands needed to retain the wing .

TYPE AIRCRAFT — The code shows you the category of aircraft this kit belongs to. The explanation of the aircraft types is in the front of the catalog in the introduction of the power kit section.

KEY TO CODES

WHEEL AND SPINNER SIZES

A = 3/4"	E = 1¾"	I = 2¾"	M = 4"	R = 6"
B = 1"	F = 2"	J = 3"	N = 4½"	S = 1-5/16"
C = 1¼"	G = 2¼"	K = 3¼"	O = 5"	
D = 1½"	H = 2½"	L = 3½"	P = 5½"	

Wheel Collars
V = 3/16"
W = 5/32"
X = 1/8"
Y = 3/32"
Z = 1/16"

Key to aircraft type code
T = Trainer
P = Pattern aircraft
M = Multi-engined
S = General sport aircraft
L = Scale aircraft
Y = Pylon racing aircraft
B = Biplane

G1 = Glider with wing span under 72"
G2 = Glider with wing span of 73"-99"
G3 = Glider with wing span over 100"

Engine mounting bolts
6 = 632 mounting bolts
4 = 440 mounting bolts
3 = 348 mounting bolts
2 = 256 mounting bolts

ACCESSORY COMPLETION GUIDE

Kit Description	Spinner	Fuel Tank	Engine Mount	Main Wheels	Nose or Tail Wheel	Flexible Cable	Control Links	Aileron Links	Main Collars	Nose or Tail Collars	Hinges	Engine Mounting Bolts	Rubber Bands	Type of Aircraft	Comments
Airborne Phoenix 7 .40 Size	F	10		2F	E	2	2	2	6W		15	6(2)		P.S.	
Airborne Phoenix 7 .60 Size	G	12		H	F	1	2	2	6W		17	6(2)		P.S.	
Ace Dick's Dream				2C	C				6Y				32	S.	
Ace Upstart II	S	2	1	2E			1	2	4X			4		SY	
Ace 'Ace High' Glider													32	G1	
Ace Whizard				2F			1		4X				32	S.T.	
Ace Pacer	S	2	1				1	2						S.P.	
Ace Mach-None	S	2	1	A			1	2						S.P.	
Ace Super Pacer	F	4	1	2G	½	1	2	2	4W	2Z	15	4(2)		S.P.	
Ace Littlest Stick				2-½"	1-½"								32	S.	
Ace Aerocommander Shrike	25	2(2)	1	2D	C		2	2			13			S.L.M.	
Ace 113 Guppy 02 Power Glider	Complete													G1	
Ace 212 Alpha		12	1	2E	D				2X		7		32	S.T.	
Ace All Star Bipe		2	1	2G	A	1	2		4Y	2Z	7	4	64	S.B.	
Ace 210 1/2 A Glh II (Foam)			1	2B			1	2						S.Y.	
AFI Fournier RF/4 Motor/Glider	H			E	3A				4W	8Z			64	S.L.T.	
AFI Electra-Fli Motor/Glider	S			2D	A				*2Y	2Z			64	S.T.M.	
AFI Bushmaster Motor/Glider				2I	A				4W	2Z			64	S.T.	
AFI P-64 Victor Twin	Complete													S.L.M.	
AFI ASW-15 RC Sailplane	Complete													G2	
AFI ASW-17 RC Sailplane	Complete													G3	
AFI Super Monterey 100 In	Complete													G2	
AFI Super Malibu 72 In	Complete													G1	
Airtronics 101 Square Soar	Complete													G1	
Airtronics 102 Q-Tee 1/2 A							2						32	T.S.	
Airtronics 103 Gere Sport		4	1	2H					4X				64	B.S.	
Airtronics 203 Questor Glider														G2	
Airtronics 204 Grand Esprit	Complete													G3	
Airtronics 205 Super Questor	Complete													G1	
Airtronics 206 Aquila	Complete													G3	
Airtronics 208 Olympic II	Complete													G3	
Airtronics 209 Cadet 62 In	Complete													L,G2	
Airtronics 302 New Era III	G	4	1	3F		2			2W	2X				S.P.	
Airtronics 301 Acro-Star Bipe	G	12	1	2I	B	1	2	2	4W	2Z	15	4(2)		S.B.	
Allied Hobbies 1/2 A Streaker	S	4	1	2E			1	2	4Z		12			S.Y.	
Allied Hobbies BD-6	F	4	1	3F		1	2		4W		7	4(2)	64	S.T.L.	
Allied Hobbies Integra	H	12	1	H	G	1	2	2	6W		15	6(2)		S.P.	
Andrews Arc-1 S-Ray		4		3F			2		6W		7		64	T.S.	
Andrews Arc-2 H-Ray				3G					6W			3	64	T.S.	
Andrews Arc-7 Minimaster	G	4		3E		2	2	2	6W		15	4	64	S.P.	
Andrews Arc-5 Trainermaster	F	8		3G		1	2	2	6W		15	4	64	S.P.	
Andrews Arc-6 A-Ray	D	4		3G		2	2		6W		15	4	64	S.T.	
Andrews Arc-3 Aeromaster Too		8		2K	C	1	2	2	4W	2Z	15	6	64	S.B.	
Andrews Arc-4 Sportmaster		10		3I		1	2	2	6W		15	6	64	S.P.	
Bauer Hardwoody		6		2J	A	1	2				7	4	64	S.T.	
Bridi Basic Trainer		4		2H		1	2	2	4X		15		64	S.T.	
Bridi T-20 Trainer		4		3G		1	2	2	6W		15	4(2)	64	S.T.	
Bridi Sportster	D	6		2H	A	1	2	2	4X	2Z	15	4	64	S	
Bridi T-10 Trainer		4		2E	D	1	2		6W		7	4	64	S.T.	
Bridi Sun Fli 4-20		6		2F	E	2	2	2	6W		15	4		S.P.	
Bridi Super Kaos 40	G	8		3G		1	2	2	6W		15	6		S.P.	
Bridi Trainer 40		8		3H		1	2	2	6W		15	6	64	S.T.	
Bridi Compass Cope 'R'		8		3H		2			6W		11			S.L.	*Needs fan unit
Bridi Tweedy Bird	E	G		2F	E	1	2	2	6W		15	4		S.P.	
Bridi Dirty Birdy 40 Wood	F	8		2F	E	1	2	2	6W		15	6		S.P.	
Bridi Quickest 500		8		2G	A	1	2	2	2W	2Z	15	4		S.Y.	
Bridi 15-500		8		2G	B	1	2	2	4W	2Y	15	4		S.Y.	
Bridi Trainer 60		12		2J	I	1	2	2	6W		15	6	64	S.T.	
Bridi Kaos		12		2I	G	2	2	2	6W		15	6		S.P.	
Bridi Super Kaos 60	I	12		2I	G	2	2	2	6W		15	6		S.P.	
Bridi Aero Commander Shrike	F(2)	8(2)		2K	F	2	4	3	6W		12			S.L.M	
Bridi Dirty Birdy 60 (Fibergls)	H	14		3G		1	2	2	6W		17	6		S.P.	
Bridi Dirty Birdy 60 (Wood)	H	14		3G		1	2	2	6W		17	6		S.P.	
Bridi P-51 Fiberglass	L*	12		2L		1	3	2	4W	3Y	21	6(2)		S.L.	*Need P-51 spinner
Bridi Brown B-2 Fiberglass	H	12		2I	B	1	2	4			21	6		S.L.	
Bridi Chipmunk		12		2G	C	1	2	6	4W	2Z	21			S L	
Bridi AT-6 Texan (Fiberglass)	G	14		2M	D	1	2	2	4W	2Y	15	6		S.L.	
Custom Mod Prod Geni Trainer													64	S.T.	

ACCESSORY COMPLETION GUIDE

Kit Description	Spinner	Fuel Tank	Engine Mount	Main Wheels	Nose or Tail Wheel	Flexible Cable	Control Links	Aileron Links	Main Collars	Nose or Tail Collars	Hinges	Engine Mounting Bolts	Rubber Bands	Type of Aircraft	Comments
Concept Airscout		4		2J	B	1	2		4X	2Z		4	64	S.T.L.	
Concept Barnstormer Bipe		8	1	2L	B	1	2	2	4W	2Z	15	6		S.B.L.	
Concept Super Fli	G	8	1	2G	B	1	2	2	4W	2Z	15	4		S.P.L.	
Concept Travelaire	E	8	1	2L	B	1	2		4W	2Z	15	6		S.B.L.	
Cox 401 Cessna Centurion ARF	Complete													S.T.	
Craft Air SP-1 Drifter							2						64	G1	
Craft Air SP-3 Windrifter							2						64	G2	
Craft Air SP-4 SD 100														G2	
Craft Air SP-5 Sailair														G3	
Craft-Air SP-6 J-Bird Glider							2							G2	
Craft-Air PK-1 Buhl Bull Pup		4	1	2G		1	2					4(2)		S.L.	
Dodgson Design Todi Glider						2	2	4			4			G3	
Dodgson Maestro Caliente														G3	
Dudgson Gull II														G3	
Dodgson Design Maestro MK III						2	2	4			4			G3	
Dodgson Hijacker II														G1	
Exhib'Air Fairchild F-27		12(2)	2	4I	G		5*		6W			6(4)		S,L,M	*48" control rods
Gas Model Products ME 109E	L	12	1	2K	B	1	2	2	4W	2Z	15	6(2)		S.L.	
Goldberg PRC-1 Ranger 42 ARF		2		2E	D				6Y			4	32	S.T.	
Goldberg G15 Falcon 56		8		2H	G				6W				64	S.T.	
Goldberg G18 Junior Falcon				2E	D		2		6Y				32	S.T.	
Goldberg G21 Skylark 56	E	8		2H	G	1	2	2	6W				64	S.	
Goldberg G22 Junior Skylark				2E	D		2		6Y				32	S.	
Goldberg G23 Junior Skylane				2E	D		2		6Y				32	S.T.	
Goldberg G26 Shoestring 54	G	4		2J	A				4W	2Z	15		64	S.T.Y.	
Goldberg G27 Skylane 62	E	8		2I	G				6W				64	S.Y.	
Goldberg G16 Senior Falcon	F	12		2J	I				6W				64	S.T.	
GMC Models 1/2 A F4U Corsair		2		2E	A		1	2	4X	2Z				S.L.	
GMC Models 1/2 A Zero		2		2F	½"		1	2	4Y	2Z				S.L.	
House of Balsa Nomad													32	G1	
House of Balsa Nomad II							2				7		32	G1	
House of Balsa Pietenpol		8	1	20	B	1	2				9	4(2)		S.L.	
House of Balsa ½ A P-51 Must	D	2	1	2D	A		1	2	4Y	2Z	10	3		S.L.	
House of Balsa 1/2 A ME-109	D	2	1	2E	A		1	2	2Y	Z	8			S.L.	
House of Balsa 1/2 A P-47		2	1	2D	½"		1	2	2Y	Z	8	4		S.L.	
House of Balsa 1/2 A Chipmunk	S	2	1	2D			1	2	2Y	Z	8	6(2)		S.L.	
House of Balsa 1/2 A P-39	D	2	1	2D	C		1	2	3Y		8	6(2)		S.L.	
House of Balsa 1/2 A Bonanza	S	2	1	2D	C		2	2	6Y		8			S.L.	
House of Balsa 1/2 A FW-190A		2	1	2E	A		1	2	4Y	Z	8	4(2)		S.L.	
House of Balsa 1/2 A Pete K-15		2	1	2H*			2		4Y		6	2		S.L.	*vintage wheels
House of Balsa P-51D (29-40)	I	8	1	2H	B	1	3	2	4W	2A		4		S.L.	
Jemco Fairchild PT-19		10	1	2H	B	1	2	2	4W	2A	15	6		S.L.	
Jemco P-51 Mustang	I	8	1	2H	B	1	2	2	4W	2A	15	6		S.L.	
Jemco ME-109	J	8	1	2H	C	1	2	2	4W	2A	15	6		S.L.	
Jemco Focke Wulfe FW-190D-9	J	8	1	2H	C	1	2	2	4W	2A	15	6		S.L.	
Jemco F4U-1A Corsair		8		2J	E	1	2	2*	4Y	2A	15	6		S.L.	*2 nyrods
Jensen Das Ugly Stick		12	1	2J	I	1	2	2	6W		15	6(2)	64	S.L.	
Lanier LA119 Cessna	E	6		3F		1	2		6X			4	64	S.T.	
Lanier LA153 Scamp	E	6		2H	F	1	2	2	6W			4	64	S.P.	
Lanier LA108 Transit		10		3G		1	2	2	6W			4	64	S.T.	
Lanier LA146 Pinto	F	8		3H		1	2		6W			4	64	S.T.	
Lanier LA154 Comet 35		6				1	2	2	6W			4	64	S.T.	
Lanier LA105 Comet II	F	12		3G		1	2	2	6X			6	64	S.T.	
Lanier LA116 Caprice	G	12		3F		2	2	2	4V	3W		6	64	S.P.	
Lanier LA124 Jester II	G	12		3F		2	2	2	6W			6	64	S.P.	
Legionair 100 Glider							2				9			G2	
Legionair 132 Glider							2				9			G3	
Legionair 140 Glider							2				9			G3	
Legionair 78 Shuttle Glider							2				9			G2	
Legionair 100 Shuttle Glider							2				9			G2	
Legionair 132 Shuttle Glider							2				9			G3	
Marks Models Windfree	Complete													G2	
Marks Models Windward	Complete													G1	
Marks Models Wanderer R.T.C.	Complete													G1	
Marks Models Wanderer 72 In.	Complete													G1	
Marks Models Sunny		4		2H	B	1	2				7			S,B	
Marks Model Bushwacker w/Acces	Complete													S.T.	
Men Trainer (.15-.25)		4	1	2H	B	1	2		4W	2Z	7	4	64	S.T.	

ACCESSORY COMPLETION GUIDE

Kit Description	Spinner	Fuel Tank	Engine Mount	Main Wheels	Nose or Tail Wheel	Flexible Cable	Control Links	Aileron Links	Main Collars	Nose or Tail Collars	Hinges	Engine Mounting Bolts	Rubber Bands	Type of Aircraft	Comments
Men Buzzard Bombshell		8	1	2L		1	2		4X		9	4	64	S.T.	
Men Trainer 40		8		3H		2	2	2	6W			6	64	S.T.	
Michigan Hobby Quickie Bipe	D	6	1	2F	A	1	2			2Z	7		64	S B	
Michigan Hobby Quickie	E	4		2D	½"					2Z			32	S.T.	
Michigan Hobby Small Wonder		4	1	2F	A	1						4		S.T.	
Michigan Hobby Miss Vintage		8	1	2L		1	2		4W		15	4(2)		S.T.	
Mile High Models Joy Stick		2	1	3A					6Y			3	64	S	
Mile High Mdls Super Joy Stick		4	1	3E		1			6X				64	S	
Mile High Models 1/2 A Hornet		2					1	2						S.Y.	
Midwest Hawk	Complete													G3	
Midwest Lil 'T' Glider #121							2				3		64	G2	
Midwest Silent Squire #132														G2	
Midwest Tri Squire #106	D	4		2H	F	1	2		2X		7	4	64	S.T.	
Midwest Lil Tri Squire #109				2G	C		2						32	S.T.	
Midwest Little Stick #122	E	4		2H	F	2	2	2	2W			4	64	S.T.	
Midwest Cardinal ARF #125	D	4		2F	E	1	2		4Y	2X		4	64	S.L.	
Midwest Super Chipmunk #126	D	4		2F	A	1	2		4X	2Z		4	64	S.T.	
Midwest Sweet Stick #128	F	10		2I	G	2	2	2	6W			6	64	S.T.	
Midwest Strikemaster #130	H	8		3H					6W			4		S.T.	
Midwest Attacker Kit #134	G	8		3H					6W					S.P.	
Midwest Mach 1 #127	G	12		2H	E	2	2	2	6W			6		S.T.	
Midwest Cardinal Squire #129	H	12		2J	H				6W					S.P.L.	
Midwest Pitts Special #131	G	12		2J	C									G1	
Model Dynamics Gryphon	Complete														
MRC RTF Cessna Without Radio	Complete													S.T.	
MRC RTF Cherokee Without Radio	Complete													S.T.	
Bud Nosen Aeronca Champ—9 Ft.		12		2O	D	1	2	2	4W	2Z	18	6(2)		S.L.	
Bud Nosen Cessna 310 Twin—10 Ft.	2J	12(2)	2	2L	J	2	2	4	6V		21	6(4)		S.L.	
Bud Nosen Citabria — 9 Ft.	G	12		2M	D	1	2	2	4W	2Z	18	6(2)		S.L.	
Bud Nosen J-3 Cub—9 Ft.		12		2N	D	1	2	2	4W	2Z	18	6(2)		S.L.	
Bud Nosen Mr. Mulligan—9 Ft.		12	1	2N	D	2	2	2	4W	2Y	20	6(2)		S.L.	
Bud Nosen Gere Sport Bipe—8 Ft.		12	1	2R		1	2	2	4W		22	6(2)		S.B.L.	
Bud Nosen Jenny—8 Ft.			1	2O		1	2	2			19	6(2)		S.B.L.	
Bud Nosen Trainer 8.5 Ft.	F	12	1	3M		1	2	2	6W		19	6(2)		S.T.	
Dave Platt RC1 Spitfire	L*	12		2K	D	1	2	2	4W	2Z		6		S.L.	*P-51 type
Dave Platt RC2 T-28B		12		2J	F	1	2	4	6W			6		S.L.	
Dave Platt RC3 Focke Wulf 190	L	12		2L	D	1	2	2	4W	2Z		6		S.L.	
Dave Platt RC4 Waco		12		2K	D	1	2	4	4W	2Z		6		S.B.L.	
Prather LT162 1/4 Mgt Lil Tony	D	4	1			1						4		S.Y.	
Prather Lil Tony Pylon Racer	F	8	1			1	2	2				6		S.Y.	
Prather Panther #148	G	12	1	2I	H	1			4W			6(2)		S.T.	
Prather Pole Cat Trainer PC154	G	4		2C		1	2		2X			4		S.T.	
Proctor Mini-Antic #505		8		2-3¾*		1			2W			6		S.	*spoked wheels
Proctor Antic Mono #701		12		2O*		1			2W			6		S	*spoked wheels
Proctor Antic Bipe #703		12		2O*		1			2W			6		S.	*spoked wheels
Proctor Nieuport II #801	G	12	1	2N*					4W			6		S.L.	*spoked wheels
Royal Hein Junior (Tony)	F	10		2H	B	1	2	4	4X	2Z	15	4		S.L.	
Royal Zero Junior	E	8		2F	B	1	2	4	4X	2Z	15	4		S.L.	
Royal Spitfire Junior	H	6		2H	B	1	2	2			15	4		S.L.	
Royal Piper Colt Junior	C	6		3J		2	4	4	4X			4		S.L.	
Royal Bleriot XI		8	1	20*	K*	1	2					4(2)		S.L.	*spoked wheels
Royal Cessna 206	G	12		2I	G	2	2	4			15	6		S.L.	
Royal Focke Wulf 190	I	12		3¾(2)	E	1	2	4	3/8(4)	2Z		6		S.L.	
Royal Corsair F4U-ID		12		2L	C	1	2	4	4W	2Z	21	15		S.L.	
Royal Phantom F4J	G	10		3H		2	3	2	4W		15	4		S.L.	
Royal Cessna 182		12		2I	H	1	2	2	6W		15			S.L.	
Royal B-25 Twin		12(2)		2J	F	3	4	2	4W		18			S.L.M.	
Royal P-38 Twin	2I	8(2)		3¾(2)	L	2	3	4	4W		18	4(2)		S.L.M.	
Royal Spirit of St. Louis	J	10'		2N*		1	2	2			15	6		S.L.	*vintage wheels
Poyal Pitts Special	F	12		2I	B	1	2	2	4W	2Z	15	6		S.B.L.	
Royal Hein Senior (Tony)	J	12		2J	A	1	2	2	4W	2Y	9	6		S.L.	
Royal Oscar (Hayabusa)	H	12		2K	B	1	2	2	4W		15	6		S.L.	
Royal Cessna 310 Q (Twin)	2F	12(2)		2I	G	3	2	2	6W		15	6(2)		S.M.L.	
Royal Zero	I	10		2K		1	2	4			15	6		S.L.	
Royal Spitfire	I	12		2J	C	1	2	4	4W	2Z	15	6		S.L.	
Royal Aquarius	H	12		2I	H	1	2	2	6W		15	6		SP	*retracts required
Royal Piper Colt Senior	E	12		3J		2	2	2	6W		15	6		S.L.	
Royal Cessna Skymaster	G(2)	10(2)		2I	H	2	2	4	6W		15	4(2)		S.L.M.	

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Royal F8F Bearcat		12		2K	C	1	2	2	4W	2Z		6		S.L.	
Royal S2 Pitts Special	G	12		2I	C	2	2	4	2W	2Z	15			S.L.B.	
Royal Staggerwing Beech		12		2K	D	1	2	2	2W	2X	15	6		S.L.B.	
Royal Douglas C-47		8(2)		2K	C	2	2	5			15	6(2)		S.L.M.	
Royal P-51D Mustang	L*	14		2M	D	1	2	5	4W	2Y	21	6		S.L.	*P-51 type
Royal Twin P-68 Victor		4(2)		2H	G	2	2	2			15	4(2)		S.L.M.	
Royal Ju 87D-5 Stuka	J	12		2L	D	1	2	2						S.L.	
SIG #RC-3 Piper J-3 Cub		6		2J					4X					S.L.	
SIG #RC-26 Clipped Wing Cub		6		2J					4X					S.L.	
SIG #RC-31 Kadet Trainer	F	6		2I	G	2	2		6W			4	64	S.T.	
SIG #RC-30 Citabria		12		2I	B					2Z				S.L.	
SIG #RC-32 Kommander	G	10		2J	G	2	2	2	6W			4(2)		S.T.	
SIG #RC-35 Kougar	G	12		3H		1	2	2	6W			4(2)		S.P.	
SIG #RC-38 Smith Miniplane				2I	E				4W	2Z				S.B.L.	
SIG #KBRC1 Super Chipmunk	F	10		2I	C	1			4W					S.L.	
SIG #KBRC-4 Cessna 150	E	8		2I	G	3			W			6		S.L.	
SIG #RC-29 Komet (Balsa Skin)	G	12		3H		2	2	2	6W					S.P.	
SIG #RC-34 Skybolt	F	12		2H	C									SBL	
Skyglas Vertigo II	G	12	1	2G	F	1	2	2	6W		15	6(2)		S.P.	*2 sets RCS #29 hdwe
Skyglas P-47N Thunderbolt		12	1	2K	B	1	2	2	4W	2Y	21	6(2)		S.L.	
Skyglas Phoenix 6	F	12	1	2G	F	1	2	2	6W		15	6(2)		S.P.	*2 sets RCS #29 hdwe
Skyglas F8F Bearcat	F	12	1	2F	A	1	2	2	4W		15	6(2)		S.L.	
Bob Smith Patricia (Pattern)	G	16	1	2H	G	1	2	2			15	6(2)		S.P.	
Soarcraft Magnum 12	Complete													G3	
Soarcraft Centurion II	Complete													G3	
Soarcraft Glasflugel 604 Kit	Complete													G3	
Soarcraft Skybolt Bipe														S.B.L.	
Soarcraft Spinks Akromaster	G	14	I	2J	B	1	2	2	4W	2Z				S.L.	
Southwestern Top Cat Sailplane											6		32	G1	
Southwestern Honker			1								6		32	S.T.	
Southwestern Honker Bipe		4	1	2H					4X		6	4(2)	64	S.B.	*can accept ails.
Southwestern Li'l Gypsy		1	1	2F			2		4Y				32	S.T.	
Spickler Quickie 200		1	1	2D			2		4Y		8			S.Y.	
Spickler Quickie 500 Kit		8	1	2G		1	2	2				6(2)		S.Y.	
Southern RC Bobcat	F	8		2F	E	1	2	2	6W		15			S.P.	
Southern RC Mustang-X	F	8	1	F	E	1	2	2	6W		15	4		S.P.	
Southern RC Gator Flex	F	8	1	F	D	1	2	2	6W		15	6		S.P.	
Southern RC Alley Kat		8	1	3F		1	2	2	6W		15	4(2)		S.P.	
Southern RC Standard Tigertail	G	12	1	2H	F	1	2	2	6W		15	6(2)		S.P.	
Southern RC Deluxe Tigertail	G	12	1	2H	F	1	2	2	6W		15	6(2)		SP	
Southern RC Std. Compensator	2G	12	1	G	E	1	2	2	6W		15	6		S.P.	
Southern RC Deluxe Compensator	2G	12	1	G	E	1	2	2	6W		15	6		S.P.	
Southern RC Compensator (Glass)	2G	12	1	G	E	1	2	2	6W		15	6		S.P.	
Southern RC Standard Atlas	H	14	1	3F		1	2	2	6W		19	6(2)		S.P.	
Southern RC Deluxe Atlas	H	14	1	3F		1	2	2	6W		19	6(2)		S.P.	
Stafford Buccaneer Foam Wing	D	4	1	2D	½"	1	2	2			12	4		S.L.	
Stafford Tomkitty MK-15 Balsa	E	4	1	2E	D	1	2	2				4		S.P.	
Stafford Tomkitty MK-40 Foam	G	8	1	2G	E	1	2	2	6W		15			S.P.	
Stafford Twin Comanche	2F	8(2)	2	3H		2	2	11	4W					S.L.M.	
Stafford P-39 Airacobra	G	6		2I	F	1	2	2	6W				S.L.		
Stafford Comanche (Balsa Wing)	F	12	1	3H		1	2	2	6W		19			S.L.	
Stafford Acro Spt (Foam Wing)	F	12	1	2H	A	1	2	2	2W	2Z	19	6		S.L.	
Stafford Acro Spt (Balsa Wing)	F	12	1	2H	A	1	2	2	2W	2Z	19	6		S.L.	
Stafford Chipmunk	E	12	1	2H	C	1	2	2	4W	2Z		6		S.L.	
Stafford Aircoupe	15/8"	12	1	2H	F	1	2	2	6W		15	6		S.L.	
Sterling Puddle Jumper				2E	B				2						
Sterling FS-1 Piper Tri-Pacer	D	8		3I		1	2	2	6W		6		64	T.S.L.	
Sterling FS-2 Cessna 180		2		2F	B							4	32	T.S.L.	
Sterling FS-3 Mambo		2				1			4W			4	64	T.S.	
Sterling FS-5 Fairchild PT-19		6		2H	A	1	2	2	4W	2Z	7	4		T.S.L.	
Sterling FS-7 Wizard		6		2L	C	1	2	2	4W	2Z		4	64	S.B.	
Sterling FS-18 Lil Roughneck				2D									32	S.	
Sterling FS-22 S.E.5A		4				1	2	2	2W			4		S.L.	
Sterling FS-29 Fledgling	F			2J	G									S.T.	
Sterling FS-31 Citabria	D	6		G	B				4W	2Z				S.T.L.	
Sterling FS-35 Mini-Fledgling	D	2		2F					4Y					S.T.	
Sterling FS-36 1/2 A Corsair		2		2H	A				4Y	2Z				S.L.	
Sterling FS-25 Lancer	H	8		2J	F				6W				64	S.P.	

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Sterling FS-27 Rimfire		6		2H	F				6W			4	64	S.P.	
Sterling FS-8 Piper Cruiser		8		2L	C	1	2	2	4W	2Z	15	6	64	S.L.T.	
Sterling FS-20 Stearman PT-17		12		2N	D	1	2	2	4W	2Y	17	6		S.B.L.	
Sterling FS-21 Fokker D-V11		12		20					6					S.B.L.	
Sterling FS-32 Gazariator	I	10		2J	H				6W					S.T.	
Sterling FS-33 Stinson Reliant		8		2J	C									SL	
Sterling FS-34 Waco		8		2L	C	1			4W	2Y				S.B.L.	
Sureflite #108 Eye Soar Glider							2				6			G1	
Sureflite #106 Balsa Cub J-3		4				1	2		4Y	2Z		4(2)		S.T.L.	
Sureflite #107 Champion		4		2H	B	1	2		4Y	2Z		4(2)		S.T.L.	
Sureflite #109 Skylane 182	E	4		2H	F				4X	2W			64	S.T.	
Sureflite #111 Baby Birdy	D	1	1				2				10			S.P.	
Sureflite #116 All Foam J3 Cub		4		2J	B			3	2W				64	S.T.	
Sureflite 122 Spitfire-Foam		6		2J	B				4W	2Z	6			S.	
Top Flite RC-4 Tauri Trainer		6		3H		2	2		6W			4	64	S.T.	
Top Flite RC-10 Top Dawg	D	2		2G	A	1	2		*		7		64	S.	
Top Flite RC-11 Headmaster		4		2H	G	1	2		6W		7	4	64	S.T.	
Top Flite RC-14 Nobler	H	8		2J	G	2	2	2	6W		15			S.P.	
Top Flite RC-20 Freshman Trnr	F	6		2F	E	2	2	2	6W					S.T.	
Top Flite RC-7 Taurus		12		2I	H	2	2	2	6W		15	6	64	S.P.	
Top Flite RC-12 Kwik-Fli III	H	12		2J	H	2	2	2	6W		15	6	64	S.P.	
Top Flite RC-13 SE5A		10		20*		1			4W		15	6		S.B.L.	*vintage wheels
Top Flite RC-15 Contender	H	12		3H		2	2	2	6W					S	
Top Flite RC-16 P-51 Mustang	L*	12		2J	C	1	2	4	4V	2Z		6		S.L.	*P-51 type
Top Flite RC-17 P-40 Warhawk	L*	12		2L	B	1	2	4	4W	2Z		6		S.L.	*P-40 type
Top Flite RC-18 P-39 Airacobra	L*	12		2J	I	1	2	4	6W			6		S.L.	*P-40 type
Top Flite RC-19 P-47D Thunderbolt		12		2L	B	1	2	4	4W	2Z		6		S.L.	
Tower M.A.N. Trainer 40		8		3H		2	2	2	4W		15	4(2)	64	S.T.	
VK Cherokee Babe		8	1	3I		2	2	2	6W		15	4	64	S.	
VK Super Corben	E	8		2K		1	2	2			15	4		S.L.	
VK Cherokee		12		2I	H	2	2	2	6W		15	6	64	S.	
VK Fokker Triplane		10	1			1	2	4			15	6(2)		S.L.B.	
VK Nieuport 17		10	1	4¼(2)		1	2	4			15			S.L.B.	
VK Sopwith Camel		10	1	2N		1		20				6		S.L.B.	
Wing Drone Airplane Kit		8	1	2J	B				4W	2Z		4	64	S.T.	
Wing The Love Machine		8		2H	I				6W					S.	
World J-3 Cub		4		2H	B	1	2	2	4W	2Z	7		64	S.T.	
World Mr. Mulligan				2H	D							6		S.L.	

MODEL GLIDER KITS (continued from page 95)

The winch is just what it sounds like. It is a device that reels in line at a good clip, allowing the glider to *gain flying and then climb speed.* The glider stays attached to the line (called the towline) until it cannot climb any higher, then the line drops off the hook on the glider's belly, and comes to earth while the plane continues onward.

A high-start is really nothing more than a catapault with a lo-o-o-o-o-ong towline. It consists of a long nylon line which is tied to what, in effect, is a great big rubber band (usually rubber tubing is used). The entire affair is stretched out, the glider attached to the towline and let fly!

A power pod, while a curse to purists, is a simple thing to use and really very effective if you don't have the field or desire to use a winch or hi-start. All a power pod does is to mount a small engine above the wing, or below the fuselage. You run the engine until it runs out of fuel, and they you just fly the plane as a glider.

Hand-Towing the glider will do two things other than launching your glider. It will take inches off your waistline, or lose you a few friends. A hand tow is really not recommended except for the lightest of the R/C soarers. A large glider probably needs more airspeed than you can provide, so your friends will usually refuse to help you out by being the ones who must tow the beast!

Gliders

As the name implies, the glider has no engine. It flies by descending a little for each bit it travels forward. It is trading its potential energy of altitude for the kinetic energy of forward flight. This trade-off provides the airspeed necessary for flight. The less altitude that is "spent" by a glider in order for it to keep flying, the more efficient it is. If a plane is efficient enough to use rising currents of air with which to maintain flight, it is called a "sailplane". The sport of "sky-sailing" is called "Soaring."

In order for a glider to stay up, it must find rising air from time to time. But even if this air is rising, it must be rising at a rate faster than the rate at which the glider sinks. Air that is rising as the same rate as the glider's sink rate, or faster than that, is known as "lift."

Lift is unseen, but it is there. You can find it anywhere the air is bound to rise. Air will rise as the ground rises. The more steeply the ground rises, the faster the air must rise up with the hill in order to keep moving with the main air mass. When you encounter lift caused by this effect, it is called "slope lift", and the type of flying, "slope soaring". A good slope will allow the air to rise smoothly, giving you a nice, continuous band of lift near the crest of the hill.

Slope soaring is nice, because the glider will stay up as long as the wind blows, or until you get tired of flying, or the batteries run out (choose any or all of the above). When you slope soar, you just toss your glider into the wind over the valley below, and guide it straight ahead into the lift. When you hit the lift area, you may have to increase forward pressure on the stick in order to maintain a level-flight attitude. Turns are made away from the hill, only, so that you avoid a crash on the hill, itself.

The other place you will encounter rising air is in a thermal. A Thermal is a "bubble" of air that is warmer than the surrounding air. Being less dense than surrounding air, this area will rise until it cools off to the local ambient temperature of the air at higher levels. You can look for thermals where localized areas on the ground may be heated to a higher temperature than other areas. Plowed fields will be warmer than forested areas, paved roads warmer than surrounding pastures (especially at crossroads). Parking lots will cause a tremendous heating of the air above it, and you'll probably find a thermal near one.

The only way you can be sure you have found a thermal is when the glider either makes a sudden change in pitch or roll. You must be sure that you, the pilot, have not inadvertently caused this change, yourself, by making a sudden movement of the stick. Smoothness is the rule, here.

Once you have blundered into lift, the way to stay in it now becomes the problem. If the lift is over a large enough area, you can circle in it and keep the plane relatively centered in it. If you are not exactly where you bumped into the lift, just keep passing the glider through the area, and you'll probably hit some more.

If the lift is strong, you may find that the glider is rising so fast that it will be out of sight in no time. In this case, just fly out of the side of the lift, and make steep turns to lose altitude. Use as much elevator as needed in order to keep the fuselage near a level attitude. This way, you'll keep from diving the plane, and keep from building too high an airspeed. Don't try to hold the nose AT level, as you may stall . . . just keep a small nose-down attitude and you should come down smoothly, quickly, and without drifting too far downwind.

Sometimes, you'll be enjoying the flight so much that you'll not be conscious of your altitude until the bird vanishes from sight. If this happens, you're not alone. You've just become "Soar-Drunk" and now must fight for your bird . . . the sky wants it, but it's yours! The easiest way to get it back is to smoothly pull the stick into one of the corners, giving you full "up" elevator, and full rudder. The glider should start a spin, and hopefully, the lift will not be so strong that the glider won't descend. Now you should look near the last piece of sky it was in, maybe a little downwind of that spot, and hope you'll see it before it hits the ground. This method is not sure-fire, but it has helped me once or twice.

Choosing your glider: If you are just starting to get into R/C Soaring, your first choice is important, as the wrong choice is as much a hindrance to enjoyment as dead batteries in your radio!

For the outright novice, a glider in the 72" to 100" range is the best choice. The smaller gliders are easier on the budget, yet they fly well, are usually less complex to build, and will respond better to the controls. Larger gliders tend to respond quite slowly, and the beginner may not be able to apply the controls properly to "lead" the ship as it flies. Smaller gliders respond instantly, but smoothly, which is what the novice requires.

If you're an experienced power flier, you can just choose the ship you like and go ahead. The only problem: you will have some trouble adjusting to are the sluggishness of response to control input, and the very, very . . . veerry flat glide angle. You'll probably overshoot your first landings.

Below is a list of the glider kits we carry:

Up to 72": ACE Ace High, Guppy; AFI Super Malibu; AIR Questor; CRA Drifter; DOD Hijacker II (slope); HOU Nomad, Nomad II; MAR Windward, Wanderer; MOD Gryphon (slope); SUR Eye Soar.
73"-100": AFI AS-W15, Super Monterey; AIR Super Questor, Cadet, Olympic II; CRA Windrifter, SD-100, J-Bird; LEG Legionair 100, Shuttle 78, Shuttle 100, MID Lil T, Silent Squire.
100"-up (includes 100", gliders capable of top-level competition): AFI AS-W17; AIR Grand Esprit, Aquila; CRA Sailair, Windrifter, SD-100; DOD Todi, Maestro Caliente, Gull II, Maestro Mk. III; LEG Legionaire 140, Legionaire 132, Shuttle 132; MAR Windfree; MID Hawk; SOR Magnum 12, Centurion II, Glasflugel 604.

A glider cannot achieve any altitude on its own unless it is placed up in the air where it can begin to work with the air currents. There are many ways of launching a model glider up to altitude: winch, hi-start, power pod, and hand tow.

(Continued on page 94)

ACE

ace high

SPAN: 70 in.
AREA: 350 sq. in.
LENGTH: 35 in.
WEIGHT: 22-25 oz. with R/O
POWER: Babe Bee .049
FUNCTIONS: Rudder-Only or Rudder-Elevator



The Ace High is a balsa fuselage with foam wing beginners glider. It comes with a power pod (engine not included) as shown that will accept a Cox Babe Bee .049. Primarily a single channel glider it can be flown as 2 channel also.

AIRTRONICS

For thermal or slope soaring
fly with 2 or 3 channel systems

AQUILA



CAT. NO. 206

The unique combination of beauty, outstanding flight performance and structural design has made the Aquila the new standard in standard class competition. The optional lift spoilers allow a new dimension in soaring flight, permitting controlled descent from high in the sky and precise landing approaches. Full flying rudder and stabilator, combined with the polyhedral wing provide responsive control under all conditions.

The kit is loaded with deluxe extras including an infinitely adjustable tow hook, tough polyurethane landing skid, injection molded stabilator horn and rudder hinges, complete pushrod and spoiler hardware, molded canopy and all other hardware items.

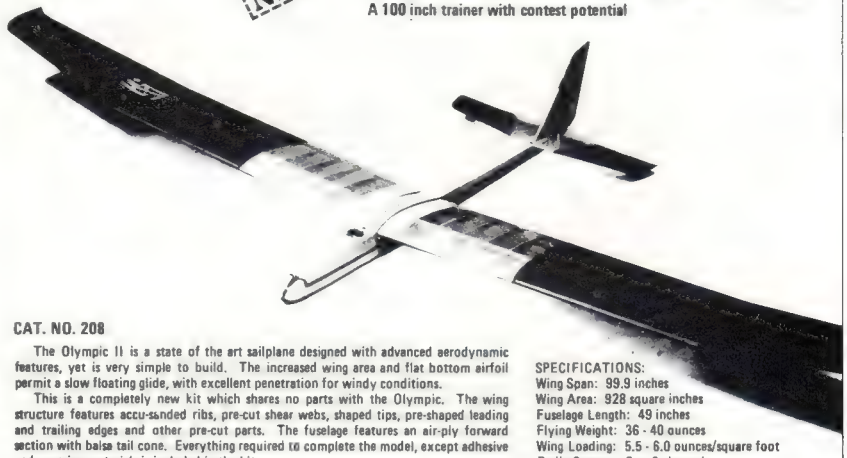
Although designed for the contest flier the Aquila is very easy to fly and can be handled by any pilot who has learned the basics of R/C soaring.

SPECIFICATIONS:
Wing Span: 99.9 inches
Wing Area: 810 square inches
Fuselage Length: 46.2 inches
Airfoil: Flat Bottom
Total Flying Weight: 40 - 44 ounces
Wing Loading: 7.5 ounces/square foot
Radio System: 2 or 3 channel

NEW

OLYMPIC II

A 100 inch trainer with contest potential



CAT. NO. 208

The Olympic II is a state of the art sailplane designed with advanced aerodynamic features, yet is very simple to build. The increased wing area and flat bottom airfoil permit a slow floating glide, with excellent penetration for windy conditions.

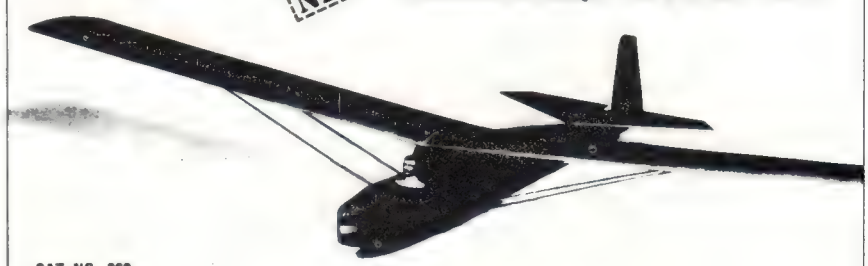
This is a completely new kit which shares no parts with the Olympic. The wing structure features accu-sanded ribs, pre-cut shear webs, shaped tips, pre-shaped leading and trailing edges and other pre-cut parts. The fuselage features an air-ply forward section with balsa tail cone. Everything required to complete the model, except adhesive and covering materials is included in the kit.

SPECIFICATIONS:
Wing Span: 99.9 inches
Wing Area: 928 square inches
Fuselage Length: 49 inches
Flying Weight: 36 - 40 ounces
Wing Loading: 5.5 - 6.0 ounces/square foot
Radio System: 2 or 3 channel

NEW

Stand-off scale with nostalgia

CADET



CAT. NO. 209

Many R/C soaring enthusiasts are interested in building and flying a scale sailplane. The high cost and time invested in building and detailing most scale sailplanes seems to inhibit many from trying this phase of R/C flying.

A small easy-to-build model which is inexpensive and still flies great, the Cadet offers a different approach to scale R/C sailplanes. The original Cadet was manufactured in Brooklyn, New York, during World War II.

The Airtronics Cadet is based on the wing from the Questor kit. The simple fuselage utilizes pre-cut balsa sides, machined formers and a few stringers. Complete hardware is included, in addition to detailed instructions and rolled plans.

The Cadet is an excellent choice for stand-off scale events, and should be competitive for documented scale contests.

SPECIFICATIONS:
Wing Span: 62 inches
Wing Area: 409 square inches
Fuselage Length: 34-1/2 inches
Airfoil: Eppler E-385 Fb
Total Flying Weight: 17 - 20 ounces
Wing Loading: 6.5 ounces/square foot
Radio System: 2 channel

AIRTRONICS

CAT. NO. 205

SUPER QUESTOR

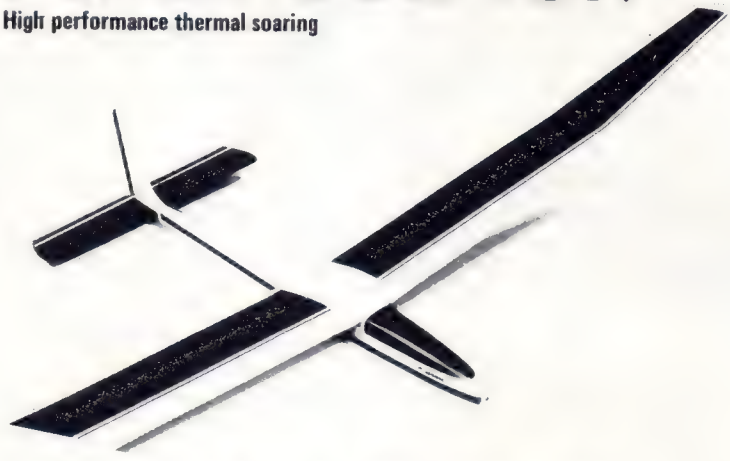
High performance thermal soaring

The Super Questor offers true high performance soaring flight in a smaller size model which is eligible for 2 meter class competition. This is the ideal transitional sailplane between the simple trainers and the advanced contest ships.

The kit is very highly prefabricated and trulock construction as in the Questor kit permits rapid and accurate assembly. All hardware is included in the kit.

Once in the air the Super Questor comes into its own. It will climb in the slightest lift, yet will penetrate well in strong winds.

SPECIFICATIONS:
Wing Span: 80 inches
Wing Area: 525 square inches
Fuselage Length: 35-1/2 inches
Airfoil: Eppler E-385 Fb
Total Flying Weight: 20 - 24 ounces
Wing Loading: 6.3 ounces/square foot
Radio System: 2 channel



CAT. NO. 101

SQUARE SOAR

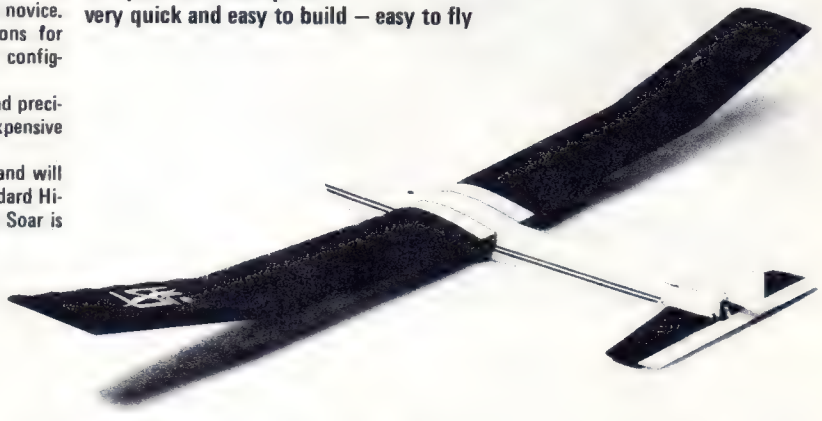
The perfect first sailplane
very quick and easy to build – easy to fly

This simple sailplane is designed for the novice who wants to experience the thrills of R/C soaring. The Square Soar features simple, rugged construction which is easy to assemble even for the novice. The kit includes material and instructions for building the Square Soar in four different configurations, including Vee-Tail versions.

The same premium quality materials and precision machined parts featured in more expensive kits also are included in this economy kit.

This ship is really at home in the sky and will soar with the best. Launched with the standard Hi-Start or optional power pod your Square Soar is capable of long pleasant flights.

SPECIFICATIONS:
Wing Span: 72 inches
Wing Area: 500 square inches
Fuselage Length: 34-5/8 inches
Airfoil: Flat Bottom
Total Flying Weight: 22 - 25 ounces
Wing Loading: 6.4 ounces/square foot
Radio System: 2 channel



CAT. NO. 203

QUESTOR

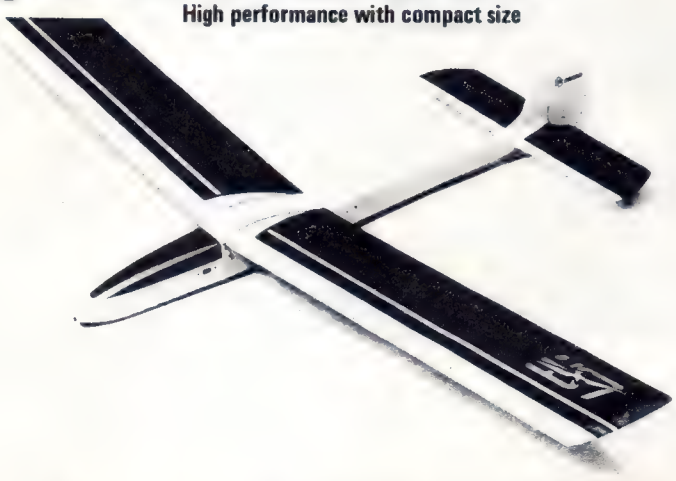
High performance with compact size

A five foot sailplane with a glide that is better than many larger ships. Carry it in your car trunk and be ready for instant soaring.

Open the box and examine the parts. From the hardwood noseblock to pre-cut sub-fin support every part is fully machined. Even the center wing ribs are angled to provide the correct dihedral.

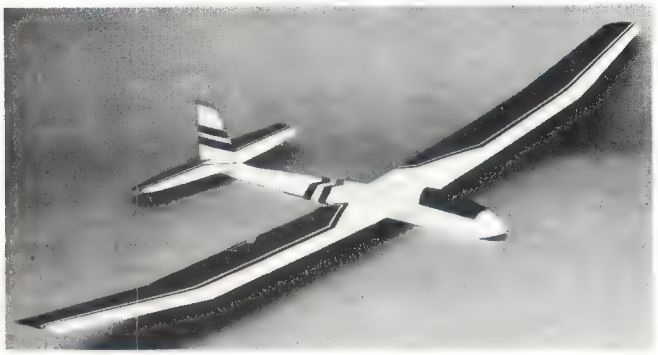
Questor offers the thrill of soaring in a compact package. The quick control response limits this ship to the experienced flier. The novice should try a Square Soar or Super Questor first.

SPECIFICATIONS:
Wing Span: 62 inches
Wing Area: 409 square inches
Fuselage Length: 35-1/2 inches
Airfoil: Eppler E-385 Fb
Total Flying Weight: 15 - 20 ounces
Wing Loading: 6.4 ounces/square foot
Radio System: 2 channel



AIR71101	AIRTRONICS 101 SQUARE SOAR	24.95	20.50	97	AIR71206	AIRTRONICS 206 AQUILA	69.95	52.45	96
AIR71203	AIRTRONICS 203 QUESTOR GLIDER	34.95	27.95	97	AIR71208	AIRTRONICS 208 OLYMPIC II	49.95	38.75	96
AIR71205	AIRTRONICS 205 SUPER QUESTOR	39.95	32.95	97	AIR71209	AIRTRONICS 209 CADET 62 IN.	36.95	29.55	96

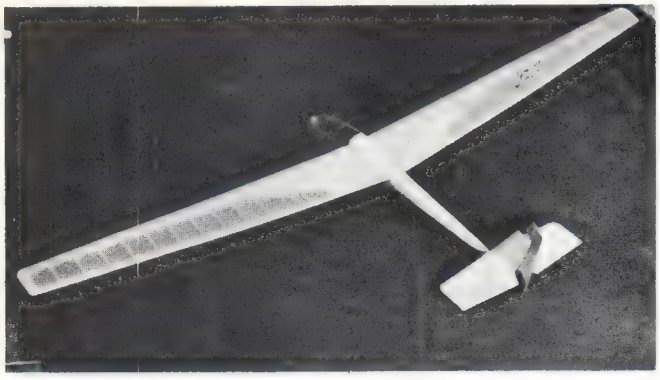
ASTRO FLIGHT (AFI)



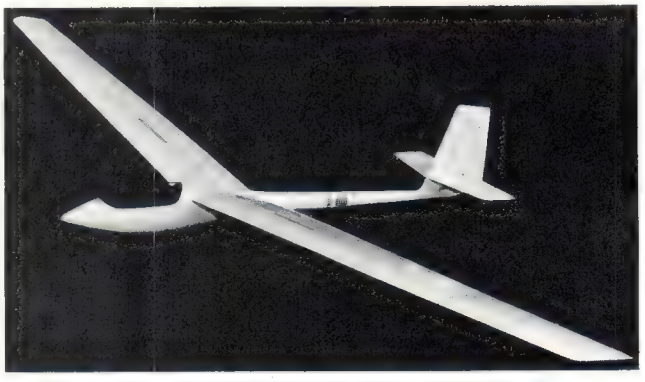
SUPER MALIBU. The perfect first sailplane, quick building, very stable, and easy to fly. Can be flown three ways: thermal, slope, or with our astro 05 electric flight system. The deluxe kit features machine cut balsa parts and all hardware. Wing span 72 in., wing area 525 sq. in., two or three channel radio, flying weight 26 to 40 ounces. In August 1970, Bob Boucher set a closed course world's record distance flight of 203 KM with the original Malibu.



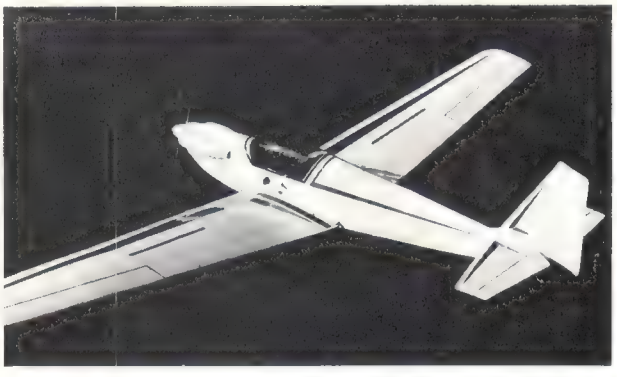
SUPER MONTEREY. The Monterey is a big brother to the Malibu featuring a 99 inch span with two piece plug-in wing panels. Its floating glide— hands off stability, and smooth control response make it very competitive in standard class soaring events. The Astro 05 electric powered version has won many electric competitions. The deluxe kit includes machine cut balsa parts and all hardware. Wing span 99 in., wing area 720 sq. in., two or three channel radio, flying weight 30 to 42 ounces.



ASW-15. A beautiful stand off scale model of Dr. Alexander Schleicher's standard elan ASW-15. The fuselage is rotationally moulded polyethelene in one single piece, and is extremely rugged. Fuselages are available in six colors, red, white, blue, orange, yellow, and green. The ASW-15 is very clean and fast and is unexcelled on the slopes yet it is light enough to thermal. Wing span 100 in., wing area 650 sq. in., two channel radio, flying weight 40 ounces.



ASW-17. A beautiful stand off scale model of Dr. Alexander Schleicher's world famous ASW-17 open class sailplane. The model features fiberglass fuselage and two piece plug-in wing panels with spoiler. A large graceful model for thermal flying, the prototypes of this kit won 1st, 2nd, and 3rd in the scale event at the 1972 California North South Challenge Meet. Wing span 132 in., wing area 980 sq. in., two or three channel radio, flying weight 60 ounces.



FOURNIER RF-4 Motorglider's an eye catching scale model of the classic Volkswagen powered motor glider, made world famous by Mira Slova's transatlantic flight. This all balsa kit is designed to accept the astro 15 motor or a glo .15 cu. in. engine. Its simple construction and gentle flying habits suit the Sunday flyer, and its classic beauty makes it a perfect project for the serious scale builder. Wing span 72 in., wing area 600 sq. in., Astro 15 or Glow 15, three or four channel radio, flying weight 48 to 64 ounces.

NEW!!

CALIFORNIAN

Span 115" Area 915 sq.in.
Weight 42 oz.
Designed for 3 channel
Comes with spoilers



AFI71003	AFI FOURNIER RF/4 MOTOR/GLIDER	44.95	32.60
AFI71015	AFI ASW-15 RC SAILPLANE	59.95	44.95
AFI71017	AFI ASW-17 RC SAILPLANE	79.95	60.50
AFI71020	AFI SUPER MONTEREY 100 IN	44.95	32.60
AFI71025	AFI SUPER MALIBU 72 IN	29.95	22.50
AFI71030	AFI CALIFORNIAN SAILPLANE	69.95	52.50

DODGSON DESIGNS

MAESTRO MK III #DOD71003

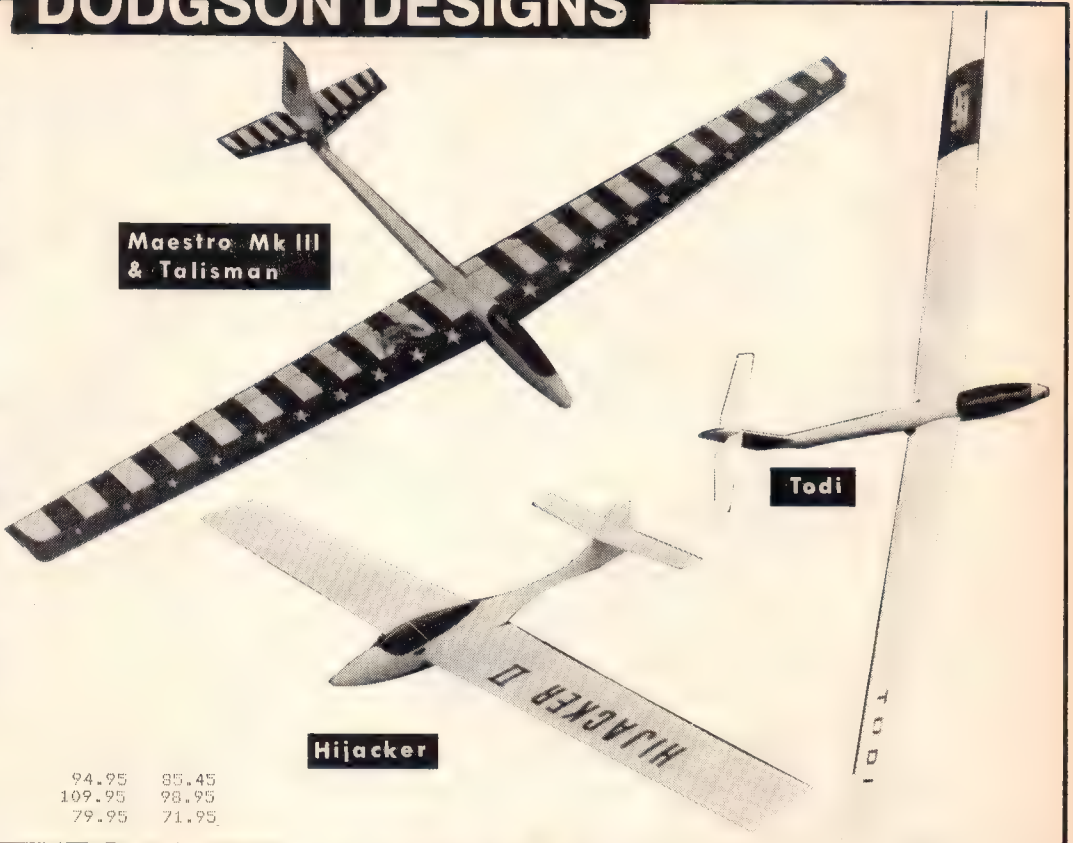
ARE YOU LOOKING FOR AN F.A.I. PLANE TODAY AND FINDING ONLY YESTERDAY'S STATE OF THE ART SAILPLANES WITH THICK AIRFOILS, POLYHEDRAL, FLUTTER-PRONE WING CONSTRUCTION AND LETHARGIC CONTROL RESPONSE? MEET OUR NEW MAESTRO MK III! Here is a plane **WITH HIGH L/D TO COVER THE MOST DISTANCE POSSIBLE ON THE DISTANCE COURSE.** It has **PROVEN LIGHT AIR AND THERMALING ABILITY SECOND TO NONE FOR DURATION.** What is most amazing is that the Mk III **CAN FLY THE SPEED COURSE IN ONLY 12.8 SEC. WITH JUST 12 OZ. OF BALLAST.** This means speeds of 70 plus MPH are possible on the straight legs! The new Mk III has many refinements including a **NEW FIBERGLASS TAILBOOM** to compliment the **BEAUTIFUL FIBERGLASS POD,** a **NEW RUDDER HINGE LINE** for smoother control at high speeds and **EXCLUSIVE BALLASTING INSTRUCTIONS FOR F.A.I.** showing the **NEW, LOW-STRESS VER MULM METHOD OF BALLASTING. SPECIFICATIONS:** Fuselage - **FIBERGLASS POD & BOOM:** Wing Span - 132"; Wing Area - 990 Sq. in.; Airfoil - 8½% thick flat bottom; Aspect Ratio - 18:1; Wing Loading - 8 oz./sq. ft.; No. of Channels - 3 - 4; Controls - **COUPLED RUDDER AND AILERON, FLAPS (FLAPERONS), ELEVATOR, SPOILERS.** Includes **ALL SPECIALIZED HARDWARE INCLUDING SPOILER LINKAGE, THE COUPLER & FLAPERON LINKAGES.**

TODI #DOD71000

Our **WORLD FAMOUS TODI** is still available **WITH 2 COMPLETE SETS OF WINGS** 76" span and 100" span yielding **A COMBINATION SLOPE AND THERMAL PLANE** that is **STILL UNMATCHED IN THE INDUSTRY.** The Todi has **ACHIEVED MANY F.A.I. CONTEST TROPHIES IN EUROPE** and has been flown to **ENDLESS CONTEST WINS IN THE U.S. IT IS STILL WINNING! SPECIFICATIONS:** Fuselage - **FIBERGLASS POD,** rolled balsa tailboom; Wing Span - 76" & 100"; Wing Area - 450 sq. in. & 700 sq. in.; Airfoil - semi-symetrical & modified Eppler 387; Wing Loading - 10 oz./sq. ft. & 7 oz./sq. ft.; No. of Channels - 3; Controls - **COUPLED RUDDER AND AILERONS, FLAPS (FLAPERONS) AND ELEVATOR.** Includes **ALL SPECIALIZED HARDWARE** including the coupler & flaperon linkages.

HIJACKER II #DOD71004

Read about the HiJacker in reviews in October 1975 **MODEL BUILDER** and November 1975 **RCM.** The HiJacker II is even better! It **BUILDS FAST** and **EASILY,** is **BEAUTIFUL** and **DURABLE** when finished, and flies on the slope in **WINDS AS LOW AS 5 MPH,** yet it can **CRUISE AT SPEEDS OF 50 to 60 MPH.** What is more, the HiJacker II is **FULLY AEROBATIC** and a **THRILL TO FLY.** It boasts the following **FEATURES: BEAUTIFULLY HAND-CRAFTED** and **JOINED CLEAR FIBERGLASS** fuselage, **FOAM WING CORES** for fast building, **ALL BALSA SHEETING** supplied, **ALL** wood parts **MACHINE CUT, COMPLETE HARDWARE** including: Dodgson L-3 aileron linkage, push rods, links & hinges, **NEW FAST SHAPE STABILIZER** requires almost no building or sanding, **WING SPAN** 72 inches, **WING LOADING** 10 oz./sq. ft., **CHORD THICKNESS** 8 **PERCENT.**



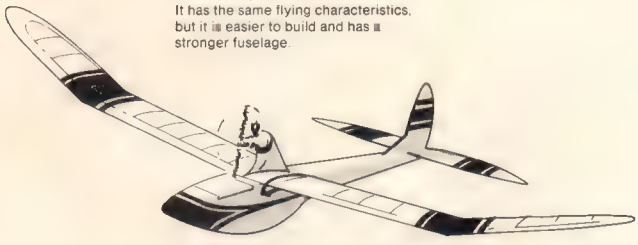
DOD71000	DODGSON DESIGN TODI GLIDER	94.95	85.45
DOD71003	DODGSON DESIGN MAESTRO MK III	109.95	98.95
DOD71004	DODGSON DESIGN HIJACKER II	79.95	71.95

HOUSE OF BALSA

Nomad

A new R/C sensation–
Designed by Ted Strader

The new improved Nomad is back! It has the same flying characteristics, but it is easier to build and has a stronger fuselage.





Specifications
Wing Span 48 in.
Area 230 sq. in.
Fuselage Length 28 in.
Total Wt. 11 oz.
Engine Displacement .010-.020

Kit Includes
Matched One Piece Fuselage Sides
All Balsa Construction
Complete Instruction Manual
Full Size Plans

A radio control change of pace!

Nomad Two

The Nomad Two is an inexpensive, high quality, easy building, light wing loading, powered or unpowered glider for two channel brick or individual servo radio systems. This design is suitable for slope, thermal, or powered soaring. It is gentle in the hands of a beginner and responsive to the hands of an expert. If your needs are an inexpensive stable training glider or an aerobatic fun Sunday flyer, the Nomad Two is for you.

Specifications
Wing Span 61 in.
Area 290 sq. in.
Fuselage Length 28 in.
Total Wt. 18 oz.
Engine Displacement .020

Kit Includes
Matched One Piece Fuselage Sides
All Balsa Construction
Illustrated Instructions
Full Size Plans
Fixed or Removable Power Pod

HOU71001	HOUSE OF BALSA NOMAD	13.95	11.95
HOU71002	HOUSE OF BALSA NOMAD II	19.95	15.95
HOU71003	HOUSE OF BALSA SANTANA GLIDER	Price unavailable at press time	

CRAFT-AIR

Windrifter

The recognized leader in Standard Class . . .

THE FORGIVINGNESS THAT MAKES WINDRIFTER A WINNER — MAKES WINDRIFTER EASY TO FLY!



SP-3

- DELUXE QUALITY KIT
- PRECISION MACHINE SANDED RIBS
- ALL HARDWARE INCLUDED

In 1975, 1976, and again in 1977 the Windrifters took more trophies than any other sailplane.

In 1977 Windrifter SD 100's won three regional grand championships: SC^2 (So. Calif. Soaring Clubs), TS^3 (Tri-State Soaring Society), Great Lakes Soaring League, as well as the AMA NATS (Std. Cl.).

More pilots have won more trophies with Windrifters than with any other R/C sailplane—ever.

Wing Span	99.8 in.
Wing Area	903 sq. in.
Lifting Surface	1042 sq. in.
Wing Loading*	6.38 oz./ft.^{2}
Flying Weight*	40 oz.
Airfoil	Craft-Air 11½% flat bottom

*Without ballast. Up to 4 lbs. ballast may be added.

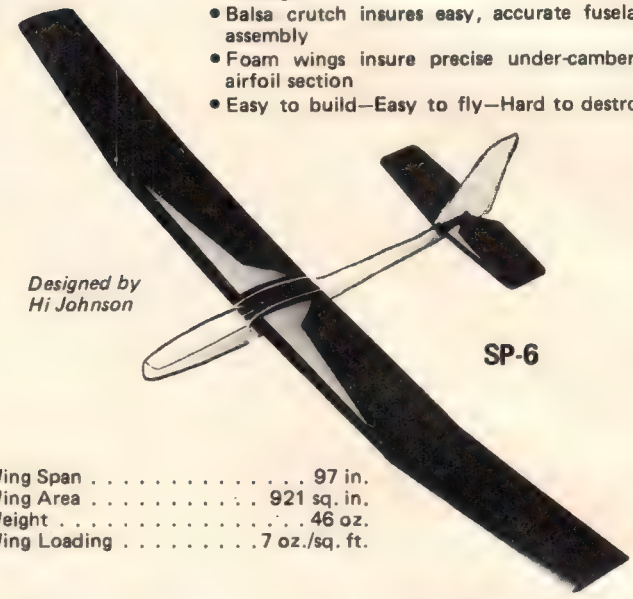
Optional Spoiler Kit SP-325

J-Bird

HIGH PERFORMANCE TRAINER

- Superb thermal performance, equal to the best contest sailplanes
- Almost indestructible ASA (not ABS) plastic fuselage
- Balsa crutch insures easy, accurate fuselage assembly
- Foam wings insure precise under-cambered airfoil section
- Easy to build—Easy to fly—Hard to destroy

Designed by Hi Johnson



SP-6

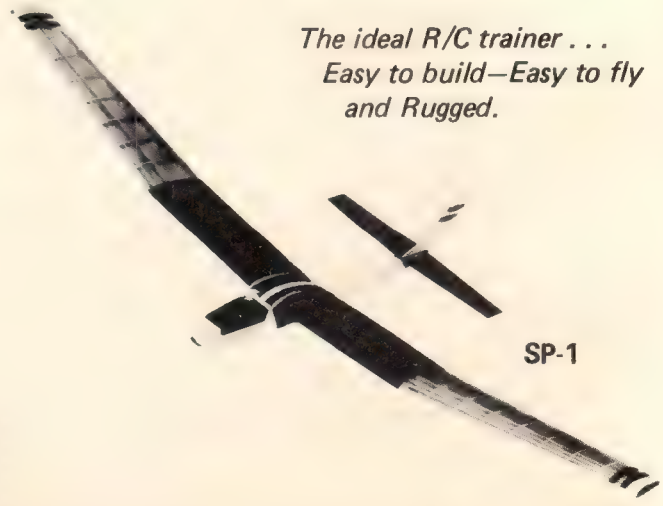
Wing Span	97 in.
Wing Area	921 sq. in.
Weight	46 oz.
Wing Loading	7 oz./sq. ft.

The J-BIRD will teach an aspiring pilot to fly more easily and quickly than any sailplane available. It will build easier and faster and stay together longer than most. Hi Johnson says, "If the ship you are going to build is the one you are going to learn radio control soaring with, there just isn't a better sailplane around today."

Drifter

Wing Span	72 in.
Wing Area	480 in.^{2}
Weight	20 oz.
Wing Loading	6 oz./ft.^{2}

The ideal R/C trainer . . . Easy to build—Easy to fly and Rugged.



SP-1

KIT INCLUDES ALL HARDWARE

With so many machined parts and such DETAILED INSTRUCTIONS, to fail would require DESTRUCTIVE INGENUITY.

CRA71001	CRAFT AIR SP-1 DRIFTER	24.95	18.95	100
CRA71003	CRAFT AIR SP-3 WINDRIFTER	47.95	35.95	100
CRA71004	CRAFT AIR SP-4 SD 100	59.95	45.95	101
CRA71005	CRAFT AIR SP-5 SAILAIR	129.95	93.95	101
CRA71006	CRAFT-AIR SP-6 J-BIRD GLIDER	59.95	45.95	100
CRA71071	CRAFT-AIR SP-7 VIKING MK I	79.95	59.95	101
CRA71072	CRAFT-AIR SP-7 VIKING MK II	79.95	59.95	101

CRAFT-AIR

Windrifter SD100

BALANCED RUDDER
FULL FLYING STABILIZER
SYMMETRICAL AIRFOIL TAIL SURFACES
PLUG-IN WING AND STABILIZER



SP-4

Pre-formed, rugged plastic fuselage—made of a plastic new to model aviation: ASA (not ABS). With the NEW INSTA-BUILD assembly method, the results are a stronger, lighter and quicker built fuselage.

COMPLETE HARDWARE AND CONTROL RODS

VIKING

Designed to win!
(not only light air thermal events, but FAI)

Wing Span . . . . . .3 meters (118 in.)
Wing Area . . . . . .1200 sq. in.
Wing Loading . . . . . 6½ oz./sq. ft.



SP-7

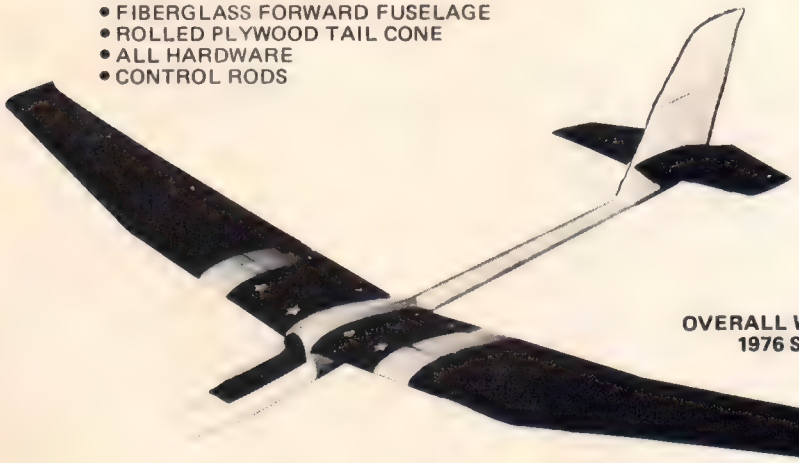
THE VIKING IS THE MOST VERSATILE OF ALL SAILPLANES.

The VIKING MARK I has the same airfoil used on the WINDRIFTER and SAILAIRE. The VIKING MARK II has a semi-symmetrical airfoil which has launching and thermalling characteristics similar to the WINDRIFTER, but is extremely competitive in FAI speed runs. Both versions are available with full flying stab or conventional stab and elevator, at the builder's choice. Both versions are available with an attractively shaped wood fuselage or a molded plastic fuselage.

Owners of either version may purchase the other wing separately, giving them the versatility of one sailplane designed to win both FAI and marginal lift thermal events.

SAILAIRE

- MACHINE SANDED RIBS
- FIBERGLASS FORWARD FUSELAGE
- ROLLED PLYWOOD TAIL CONE
- ALL HARDWARE
- CONTROL RODS



Wing Span . . . . . 150 in.
Wing Area . . . . . .1643 in.^{2}
Flying Weight . . . . 5.3 lbs. to 11 lbs.
Lifting Surface . . . . . .1931 in.^{2}
Airfoil . . . . . .Craft-Air—12% flat bottom
Wing Loading . . . . . 7.4 to 15.4 oz./ft.^{2}
Surface Loading. . . . . 6.3 to 13.1 oz./ft.^{2}
L/D (estimated) . . . . . over 20:1
L/D with spoilers deployed 3:1

OVERALL WINNER OF THE 1976 SOAR NATS

SP-5

SAILAIRE IS A SERIALIZED AND REGISTERED SAILPLANE.

Registered Sailaire owners have been, and will be, individually contacted by the designer, Tom Williams, to advise them of any new technical developments which result from Craft-Air's on-going development program. This exclusive Craft-Air service is, of course, without charge. Just one more reason why the Sailaire is the finest kit ever produced—made for those who care enough to fly the very best.

MARK'S MODELS



Wing Span . . . . . 99.25 in.
Wing Area . . . . . 555 sq. in.
Weight . . . . . 20 oz.

Windfree

One of the winningest tournament contenders since 1970.

Mr. James Gray, contributing editor to Model Airplane News, has this to say about Windfree:

"It will perform extremely well in your hands and it will improve as you improve – all the way to the top! It is the "winningest" sailplane of all time: the Windfree, by Marks Models. Here again, the price is only about 1/3 that of the fiberglass sailplanes, and, true, it isn't a scale model of any real, full size bird, but, oh, how it flies! That is the criterion anyway – performance. You'll find the Windfree a somewhat slender and dainty lass, and not as easy to build as some of the others you've tried. It's not as rugged as some of the others, either, but then, you're expected to be able to fly well enough so "crash-proofness" shouldn't be a major consideration. Use, yes, but not abuse! If your rhythm and timing are honed to a keen edge, you and your Windfree can win more trophies against tough competition than any other sailplane you may ever own."

"As for me I prefer the Windfree to anything I have ever owned."

Windward

One of the few R/C sailplanes that looks like a real plane. Sheet balsa on the leading edge of the wing and a clear plastic canopy cost more, but these are just a few of the extra features found in the Windward Kit. This plane is designed for both slope and thermal flight. Although designed primarily for the beginner, Windward won 1st Place, Standard Class at the R/C Soaring Nationals—Chicago, and 1st Place, Duration at the Western R/C Soaring Championships.



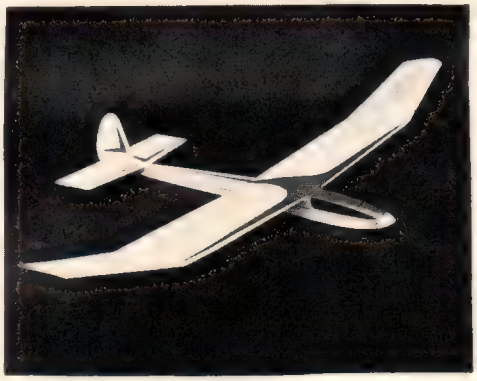
Wing Span . . . . . 72 in.
Wing Area . . . . . 532 sq. in.
Weight . . . . . 24 oz.
(With 2-channel radio)

NOTE: ALL MARK'S MODELS SAILPLANES ARE ALL BALSA CONSTRUCTION AND QUALITY IS OF THE HIGHEST LEVEL.

The Wanderer®

NEW!!

The Wanderer is now available in a 99" wing span version that is designed for the sport flyer. Can compete with other sailplanes in its class without any penalty. Particular attention was paid to the design of the wing—the result being a very rugged construction that will withstand the most demanding airloads and physical ground abuse. A high performance sailplane at a very low price — a great value!

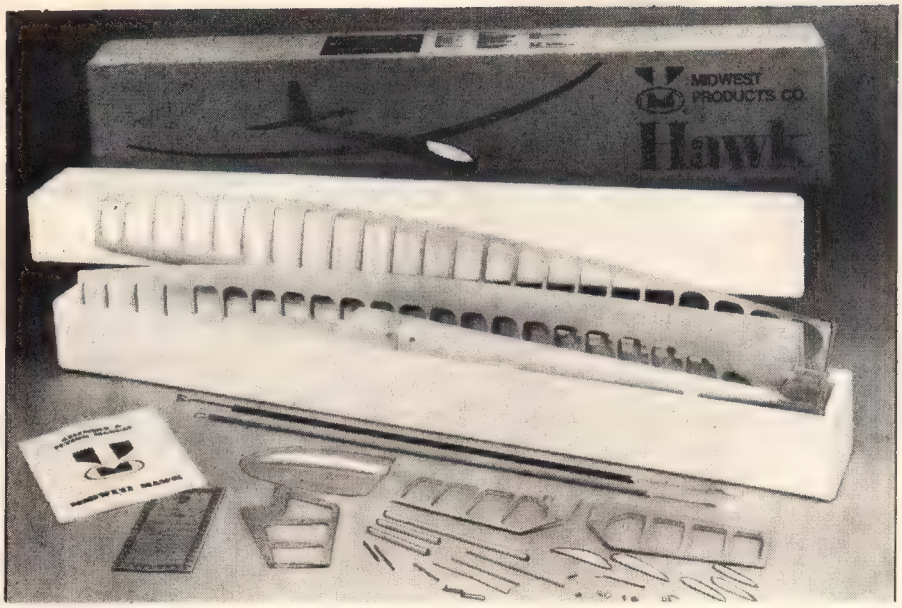


Wing Span . . . . . 72 in.
Wing Area . . . . . 563 sq. in.
Weight . . . . . 14 oz.
(Without radio)

Six feet of low-cost flying fun. If you don't like to build airplanes but love to fly them, then here is your plane. Easy to build and easier to fly, Wanderer will provide hours of fun for kids of all ages. This plane is so stable that it will fly free flight without a radio. The ideal beginners plane. The plans show how to install a small engine so you can fly your Wanderer anywhere, anytime.

MAR71001	MARKS MODELS WINDFREE	44.95	32.50
MAR71002	MARKS MODELS WINDWARD	32.95	24.25
MAR71005	MARKS MODELS WANDERER 72 IN.	19.95	14.75
MAR71006	MARKS MODELS WANDERER 99 IN.	29.95	22.50

MIDWEST



HAWK

Wing Span 99 inches. Wing Area 590 sq. inches. Weight 30 oz. less R/C gear. The Midwest Hawk is an almost ready to fly kit. Complete with its own protective carrying case, it is easily stored in the trunk of your car – ready for spur of the moment flying! The Midwest Hawk is available in kit form. The processes used to produce this kit are the most sophisticated in use today. It is excellent for both thermal and ridge soaring. To complete the kit, all you need is iron-on covering material for the flying surfaces, primer and color paint for the fuselage. Install your gear using the detailed instruction manual and go fly your Hawk! Kit No. 140

HAWK FACT SHEET

CONSTRUCTION:

Wing
Top Skin – 1/32" plywood
Inner Core – high-density foam
Bottom Skin – 1/64" plywood
Root Rib – injection-molded A.B.S.
Stab & Rudder – same as wings except both top and bottom skins are 1/64" plywood

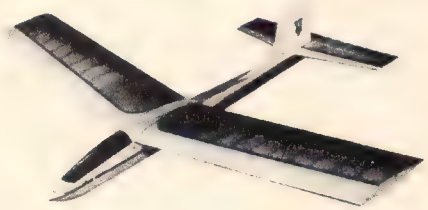
Fuselage
Nose Cone – rotationally molded of cross-linked polyethylene
Tail Cone – six layers pre-impregnated fiberglass formed under 150 P.S.I. at 350 degrees
Tail Piece – injection molded lexan

Weight – 30 oz. less R/C gear
Wing length – 99 inches
Wing Area – 590 Sq. in.
Wing loading – (with 8 oz. R/C gear) – 9.2 oz.
Airfoil – undercamber

As you can see, only the toughest materials are used to provide an airframe that is almost indestructible. This feature alone makes the Hawk a good investment for today's flier. The processes used to produce this kit are the most sophisticated in use today. This plane will appeal to both the novice and sport flier alike. It is excellent for both thermal and ridge soaring. To complete the kit, all you need is iron-on covering material for the flying surfaces, primer and color paint for the fuselage. Install your gear using the detailed instruction manual and go fly your Hawk! Each Hawk is shipped in its own molded foam case that can be used when going to and from the flying field. Replacement parts are available.



LIL "T" GLIDER #MID71121
The Lil "T" is a 74" wingspan all balsa glider that features table top construction to prevent misalignment. The model is a West Coast glider for slope soaring, tow line, high start, and power pod use. Die cut balsa, all hardware, and instructions.



SILENT SQUIRE #MID71132
This 58" wing span slope soarer is highly maneuverable and aerobatic. Stable on hi-start or winch launches and will thermal soar under suitable conditions. Kit contains die cut balsa and plywood parts, clear canopy, foam wings, all hardware, and illustrated plans with pictorial instructions.

MID71000	MIDWEST #140 HAWK SAILPLANE	130.00	97.45
MID71121	MIDWEST #121 LIL 'T' GLIDER	26.95	19.55
MID71132	MIDWEST #132 SILENT SQUIRE	39.95	27.95

RTC MODELS



RTC71100 RTC MODELS WANDERER 72 IN. RTC 54.95 48.95

RCM PRODUCT TEST

RTC MODELS WANDERER

HERE'S WHAT R/C MODELER MAGAZINE HAD TO SAY ABOUT THIS EXCELLENT READY TO COVER GLIDER!

PRODUCT TEST COURTESY OF:
R/C MODELER MAGAZINE
P.O. BOX 487
SIERRA MADRE, CA 91024





● The Wanderer from RTC Models, is a framed-up sailplane where the consumer has only to join the wing panels and tape the center section then make up the pushrods. The model is completely built of conventional balsa, spruce and plywood construction and is ready to cover. The Wanderer is a 72" span Standard Class sailplane with a total wing area of 563 square inches, and a fuselage length of 40⅜". This well known sailplane has already made its mark in sport flying and competition circles and was designed by one of the nation's top sailplane competitors, Mark Smith. With regards to the framed up Wanderer, there were several small items we discovered that should be corrected. Since we obtained our prototype, RTC Models has been purchased by a new owner, and these problems have been brought to his attention and have been subsequently corrected. The framed-up Wanderer is a perfect way to get into sailplanes if you don't have time to build or, simply, want a back-up ship. Control horns, hinges, nylon clevises with links, and tow hook are included with the Wanderer. There is one plan sheet plus a page of construction notes and a sheet of photos. Our prototype weighed 28 ounces ready to fly, for a wing loading of 7.17 oz./sq. ft. Our test model had its fuselage covered with white Solarfilm and trimmed with DJ's Trim Tape while the wing and stabilizer were covered with transparent orange MonoKote. An EK-LRB two channel radio was used for guidance. Priced at $54.95, this is an excellent beginners sailplane as well as an all around sport glider. Hi-Start launches are smooth and require little or no correction on the tow. The Wanderer performs well in light lift conditions, turns well, and is very responsive to controls. All in all, this outstanding sailplane is a pleasure to fly for both beginner and expert. □

IMPRESSIONS	E	G	A	F	P	IMPRESSIONS	E	G	A	F	P
Packaging			NA			Pre-Shaped Parts			NA		
Plans		●				Parts Match In Plans			NA		
Written Instructions		●				Overall Parts Fit			NA		
Quality of Hardwood			NA			Ease of Assembly		●			
Quality of Fiberglass			NA			Fidelity to Scale			NA		
Other Materials		●				Flight Performance		●			
Accessories			NA			Overall Appeal		●			
Die-Cutting			NA								

E = Excellent / G = Good / A = Average / F = Fair / P = Poor

SPECIFICATIONS

Name	Wanderer
Aircraft Type	Sailplane
Manufactured By	RTC Models P.O. Box 792 Escondido, California 92025
Mfg. Suggested Retail Price	$54.95
Available From	Direct from Mfg.
Mfg. Recommended Usage	Sport Sailplane
Wing Span	72 Inches
Wing Chord	8 Inches
Total Wing Area	563 Square Inches
Fuselage Length	40⅜ Inches
Radio Compartment Dimensions	(L) 7⅜" x (W) 2" x (H) 2"
Wing Location	High Wing
Airfoil	Flat Bottom
Wing Planform	Constant Chord Double Taper Tips
Polyhedral	1¼" — 3¼" (2nd panel)
Stabilizer Span	18 Inches
Stabilizer Chord (incl. elev.)	5½" (Avg.)
Total Stab Area	94 Square Inches
Stab Airfoil Section	Flat
Stabilizer Location	Top of Fuselage
Vertical Fin Height	6 Inches
Vertical Fin Width (incl. rud.)	4½" (Avg.)
Mfg. Rec. Engine Range	NA
Recommended Fuel Tank Size	NA
Landing Gear	NA
Recommended No. Of Channels	2
Recommended Control Functions	Rudder and Elevator
Basic Materials Used In Construction:	
Fuselage	Balsa & Ply
Wing	Spruce & Balsa
Tail Surfaces	Balsa
Hardware Included In Kit	horns, hinges, nylon clevises, links, tow hook
Plan Size	45¾" x 36" (1 sheet)
Building Instructions on Plan Sheets	No
Instruction Manual	Construction Notes
Construction Photos	1 sheet of photos
Mfg. Rec. Flying Weight	25 Ounces
Wing loading based on rec. flying wt.	6.5 oz./sq. ft.

RCM PROTOTYPE

Weight, Ready To Fly	28 Ounces
Wing Loading	7.17 oz./sq. ft.
Covering & finishing materials used	MonoKote & Solarfilm
Engine Make & Disp.	NA
Muffler Used	NA
Radio Used	EK-LRB
Tank Size Used	NA

SOARCRAFT



DIAMENT #SOR71001

This intermediate size RC Sailplane is available as a complete kit or as a kit with special hardware that will allow your Graupner Cirrus wings to be directly adapted. The flight characteristics make this airplane at home either in the hands of an inexperienced or experienced RC Sailplane flyer.

The rugged fiberglass fuselage is designed as a 1/6 scale replica of the full size Diament 18. The wing airfoil used is a time proven flat bottom.

The kit includes all necessary hardware, canopy, pre-formed canopy tray and high quality wood. The detailed instructions and ease of construction provide for minimum assembly time — this providing less building and more flying pleasure.

Like all Soarcraft products this airplane has been subjected to extensive tests and has been design proven through sport and competition flying for 2 years.

Span 116.5 inches, Area 842 sq. inches, Flight Weight 52 ounces, Airfoil — Flat Bottom



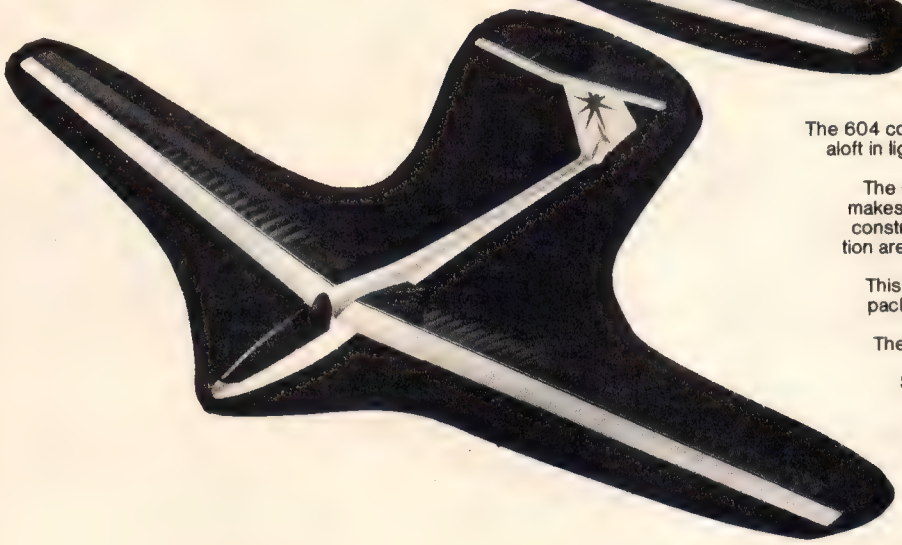
CENTURION II #SOR71011

The key design features are pre-fabricated fuselage, simplified wing construction and all flying rudder and stab. The wing attachment method provides minimum drag and a breakaway safety feature utilizing nylon screws that shear on impact.

This design has excellent light thermal ability for its size and can be flown with ease in windy conditions even though its approximate flying weight is only 28 ounces.

A newcomer to RC Sailplane flying will appreciate the ease of building and flying the Centurion II. As his flying ability increases he will find that this glider will be fully capable of excelling in standard class competition.

Span 100 inches, Area 618 sq. inches, Flight Weight 28 ounces, Airfoil — Undercambered



GLASFLUGEL 604 #SOR71604

The 604 combines a majestic appearance with an excellent ability to remain aloft in light thermals. The rugged fiberglass fuselage captures the beautiful scale lines of the full size super ship.

The model airfoil design provides docile yet responsive control which makes the 604 a must for those who wish maximum flight times, sturdy construction and pride of ownership. The fuselage and wing configuration are such that spoilers or flaps can be accommodated if the modeler so wishes.

This kit is complete with hardware, pre-cut ribs and high quality wood package — as well as illustrated instructions which reduce construction time.

The 604 has a proven contest record with a 1st place win in the '73 Nationals.

Span 144 inches, Area 920 sq. inches, Flight Weight 56 ounces, Airfoil — Undercambered

SOR71001	SOARCRAFT DIAMANT	89.50	75.95
SOR71003	SOARCRAFT MAGNUM 12	129.95	109.95
SOR71011	SOARCRAFT CENTURION II	59.50	50.55
SOR71604	SOARCRAFT GLASFLUGEL 604 KIT	99.50	84.65



MAGNUM 12 #SOR71003

Wingspan: 148 in. Area: 1112 sq. in.
Channels: 3
Material: Fiberglass fuselage,balsa/spruce/plywood wing

The Magnum 12 offers the experienced flier all the performance he can command. The high aspect ratio, polyhedral wing supports the flattest of turns thus maximizing thermal lift potential. The flat-bottom, symmetrical entry wing section allows high speed runs to clear negative lift areas. The spoilers are designed to help dissipate unwanted lift for precision rate of sink control without pitch trim variation.

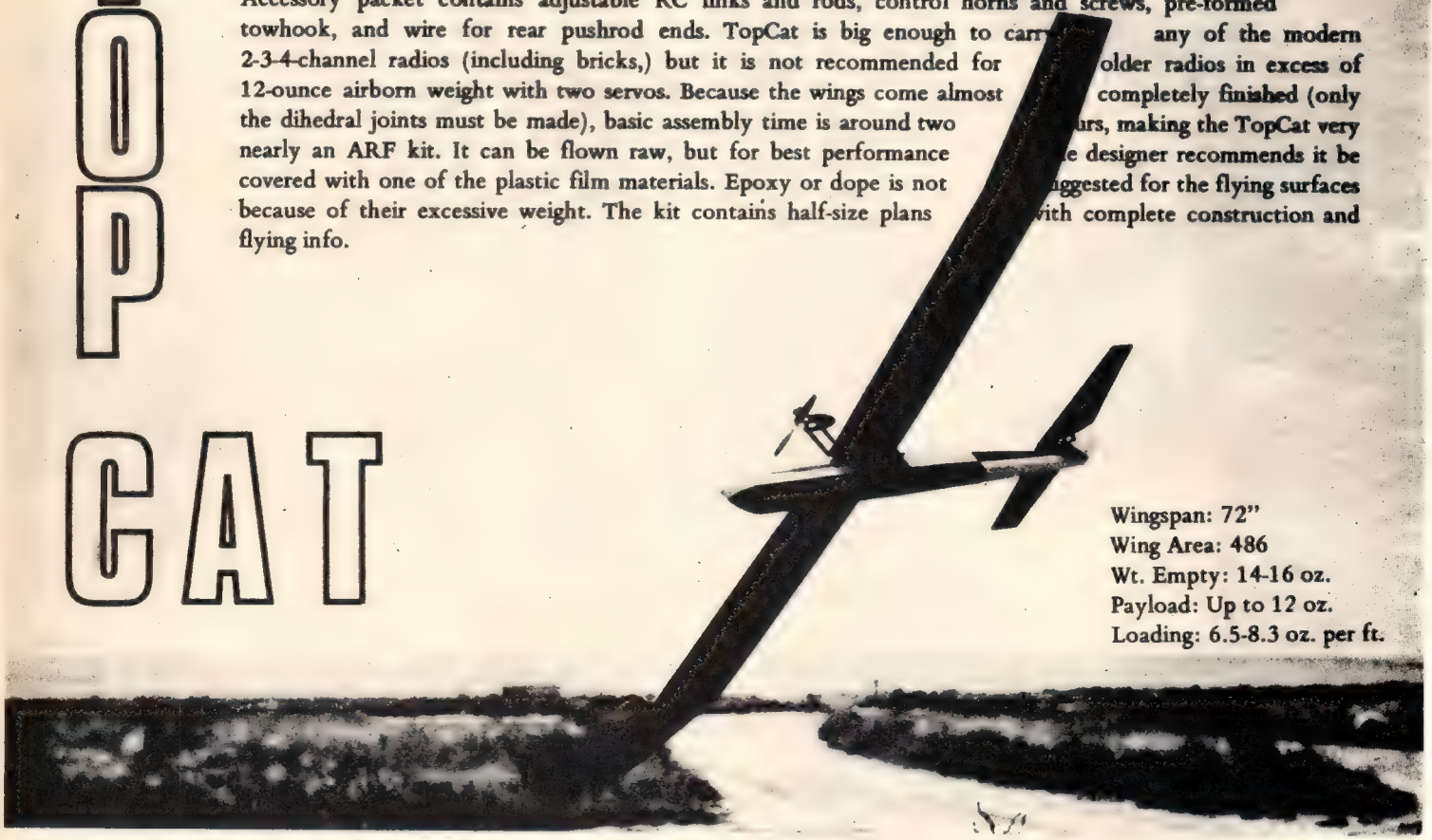
All Soarcraft kits feature fiberglass fuselage and balsa wings. All kits include complete instruction manuals with photographs, custom molded canopies, complete hardware packages, wing and stab ribs precision cut to insure airfoil accuracy, selected balsa and spruce packaged individually for ease of construction, complete kit engineering to insure excellent performance, and excellent packaging.

This is a quality line of sailplanes that is without doubt one of the finest lines Tower Hobbies carries. You will be impressed!

SOUTHWESTERN

TOP CAT

A high-performance sailplane in the two-meter class. Launch with twoline, hi-start or winch for thermal flying. Fast and maneuverable on the slope, or can be flown power-assist with an .049 engine. Construction is all sheet balsa, with some plywood reinforcing. Wings utilize the high-lift Benedict airfoil from Europe, and come in two 3' panels, completely shaped and hand-sanded and ready for covering (if desired.) Fuselage is box construction, with all parts machine-shaped for rapid assembly. Accessory packet contains adjustable RC links and rods, control horns and screws, pre-formed towhook, and wire for rear pushrod ends. TopCat is big enough to carry any of the modern 2-3-4-channel radios (including bricks,) but it is not recommended for older radios in excess of 12-ounce airborn weight with two servos. Because the wings come almost completely finished (only the dihedral joints must be made), basic assembly time is around two hours, making the TopCat very nearly an ARF kit. It can be flown raw, but for best performance the designer recommends it be covered with one of the plastic film materials. Epoxy or dope is not suggested for the flying surfaces because of their excessive weight. The kit contains half-size plans with complete construction and flying info.



Wingspan: 72"
Wing Area: 486
Wt. Empty: 14-16 oz.
Payload: Up to 12 oz.
Loading: 6.5-8.3 oz. per ft.

SOU71001 SOUTHWESTERN TOP CAT SAILPLANE 28.95 22.25

SUREFLITE

SUPER EYE SOAR GLIDER

NEW



●SPRUCE TURBULATOR SPARS ●BALSA AND PLY–WOOD CONSTRUCTION ●COMPLETE HARDWARE PACKAGE ●FULL SIZE PLANS WITH BUILDING HINTS●

SPAN: 108 in. (9 feet)
AREA: 957 sq. in.
LENGTH: 54 in.
RADIO: 2 channel

For Thermal or Slope Soaring
For Sport or Competition Flying

Kit Features:
- FULL SIZE PLANS
- DIE-CUT BALSA AND HARDWOOD PARTS
- STRONG, STURDY CONSTRUCTION
- ALL HARDWARE INCLUDED
- EASY TO BUILD AND FLY



SURE FLITE

EYE SOAR

An ideal beginners glider for flying and building. Kit includes die-cut balsa and hardwood parts plus all hardware.

Kit No.108

SPAN - 72 INCHES
AREA - 432 SQ. INCHES
EMPTY WT. - 10 OUNCES

SUR71002 SUREFLITE 108 EYE SOAR GLIDER 18.95 15.15
SUR71117 SUREFLITE 117 SUPER EYE SOAR 49.95 37.50

Model R/C Boats and Accessories

Both sailboating and power boating have come a long way in the past couple years. The stream of new ideas and new kits seems to be endless. New sailboats, deep-vees, scale ships, hydros, tunnelhulls, and air-boats, to name a few, have drawn a lot of modelers into the R/C boating field. In this section of the catalog you'll find the most up-to-date selection of these favorites at tremendous savings. As well as kits we have the appropriate hardware packages needed to complete them. Also, by checking the rest of the catalong you'll see that we have a good selection of engines, radios, control hardware, paint, everything you need to get your boat ready for the water.

A big advantage of the boat is that it requires less space to operate than a model aircraft and is ideal for the beginning R/C modeler because he can run his boat at a slow speed until he gets the feel of the controls. The hardest part is deciding on what type of boat to run. Boats are categorized by hull type. There are 4 types of hulls used in R/C power boating: mono, hydro, deep-V and tunnel. The mono hull, the best example being the popular ski-boat, has a bottom with unbroken running surface and rides on the rear portion of the bottom. The hydro has a solid or divided step in the bottom and rides on the step and the rear portion of the bottom or on just the step. The unlimited hydros are classic examples. The deep-V hull is basically a mono hull with a much deeper V bottom, usually about 150 degrees or less included angle, designed to maintain maximum speed on rough water. The Bottom usually has one or more strakes or ribs parallel to and either side of the keel. The tunnel bottom hull is basically a Catamaran design. Latest versions are the equivalent of a deep-V hull split down the keel and spread apart with the two sections connected by a raised flat bottom section. The tunnelhull is faster than a deep-V hull with the ability to handle rough water. The mono and deep-V hulls use a completely submerged propeller, while a hydro or a tunnel may use either a submerged or surfacing propeller. A surface prop installation has the propeller running with the upper half out of the water. Ideally, if the hub is running above the water, drag is reduced to a minimum and highest speeds have been reached with this arrangement. A disadvantage is the tendency of the propeller to walk the stern of the boat to the left causing boat to veer off to the right.

BRIDI

CHUBASCO



A semi-scale version of the Rayson-Craft 7.7 meter day cruser, the model uses a .40 or .60 engine. The Bridi kit includes a fiberglass hull and top--which are not joined for convenience in construction--ply motor mount bearers, ply and balsa radio box, flotation foam, a universal motor mount and stainless trim plates. Building notes, instructions for adjusting prop angle and trim plates and marine part numbers are given.

BRI70100 BRIDI CHUBASCO DV40-60 (GLASS) 84.95 63.70

COX

Trade Winds

RADIO CONTROL SAILBOAT

36

FEATURES

- Quick-adjust fittings on all shroud lines for quick assembly of riggings
- Highest quality rip stop nylon sails with battens installed
- Extruded aluminum mast. Two piece design for ease in transport
- Aluminum boom with molded fittings for easy rigging adjustments
- Hi grade metal and plastic fittings provide durability for rough weather sailing
- All deck fittings are pre-installed to permit quick assembly
- Pre-molded cavities for receiver and servos permit snap-installation of radio



For Cox/Sanwa 8020 or 8021 radio system. (not included)

New ready-built R/C Sailboat— Uses 2-channel radio.

This superb sailboat is designed for the Sunday Sailor as well as competitive racing. She meets all requirements of the *AMYA* 36-600 class, and is designed to handle well under all conditions. Easily sailed using one servo for rudder control. For additional performance, we offer an optional sail winch. (Cat No. 803810)

TECHNICAL DATA

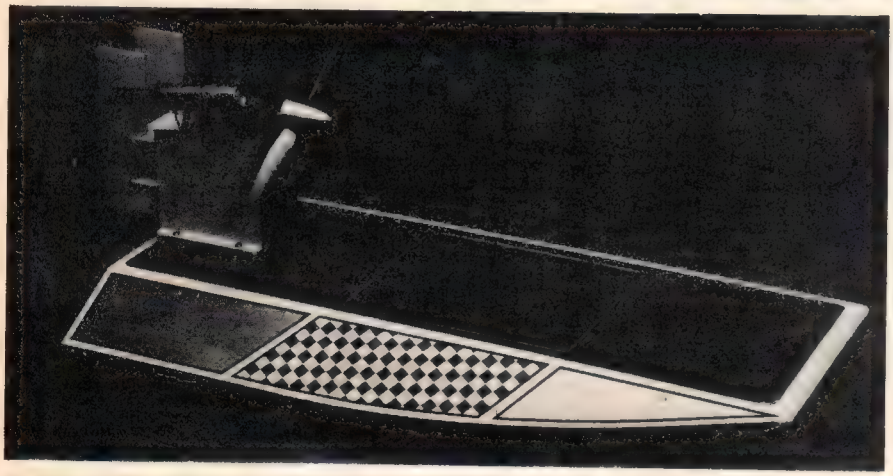
LENGTH	35.9 inches (913 mm)
HEIGHT	60.1 inches (1528 mm)
BEAM	10.0 inches (265 mm)
SAIL AREA	590.5 sq. inches (38.1 dm)
WEIGHT	9.3 lbs. (4200 gms)

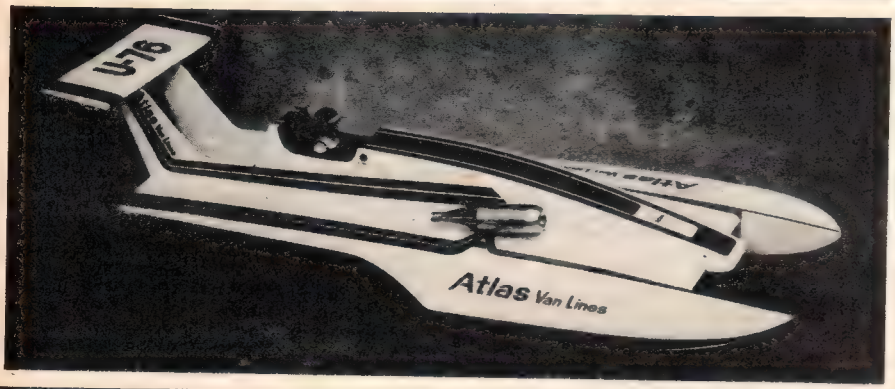
COX70601 COX 900601 TRADEWINDS SAILBOAT 129.95 103.95

DUMAS

DUM20010	DUMAS #2301 HARDWARE-SK1	24.00	20.40	110
DUM20050	DUMAS #2306 HARDWARE-AVL1	8.50	7.65	110
DUM20070	DUMAS #2309 HARDWARE-DV20	33.00	26.40	110
DUM20080	DUMAS #2310 HARDWARE-PT109	13.00	11.70	111
DUM20090	DUMAS #2311 HARDWARE-TR31,S200	50.00	39.95	111
DUM20110	DUMAS #2312 HARDWARE-TU36	55.00	43.95	111
DUM20120	DUMAS #2315 HARDWARE-AVL40	65.00	51.95	110
DUM20220	DUMAS #2321 HARDWARE-DV40,DV60	44.00	35.20	108
DUM20230	DUMAS #2322 HARDWARE-PP20	28.00	23.80	110
DUM20260	DUMAS #2313 HARDWARE-TU24	40.00	31.95	111
DUM20270	DUMAS #2314 HARDWRE-DV10,SKV10	10.00	9.00	110
DUM20273	DUMAS #2317 HDWR DRAGNFLY MKII	65.00	48.75	108
DUM20290	DUMAS #3701 SAIL CONTROL UNIT	52.00	41.60	112
DUM20325	DUMAS #2325 60 FLEX OUTDRIVE	49.00	39.20	110
DUM20326	DUMAS #2326 10 FLEX OUTDRIVE	15.00	13.50	110
DUM20327	DUMAS #2327 10 FLEX OUTDRIVE	15.00	13.50	110
DUM20328	DUMAS #2328 HARDWARE FOR U-76	47.00	37.60	108
DUM20329	DUMAS #2329 HDWR FOR 40FT USCG	43.00	34.40	111
DUM70110	DUMAS #RS30 STAR 30 SAILBOAT	47.00	36.95	112
DUM70120	DUMAS #RS36F EQUATION SAILBOAT	165.00	123.75	112
DUM70125	DUMAS #RS50F BINGO SAILBOAT	250.00	187.50	112
DUM70130	DUMAS #RS51F ETCHELLS SAILBOAT	235.00	176.25	112
DUM70132	DUMAS #1113 HUSON 36 SAILBOAT	155.00	116.25	112
DUM70140	DUMAS #RS219 LIGHTNING	20.00	16.95	112
DUM70210	DUMAS #PT109 PT-109	38.00	31.15	111
DUM70215	DUMAS #1211 DAUNTLESS	59.00	44.25	111
DUM70220	DUMAS #S200 C.G. LIFEBOAT	55.00	41.25	111
DUM70221	DUMAS #1210 40FT C.G. UTILITY	44.00	34.75	111
DUM70225	DUMAS #TC37 TUNA CLIPPER	45.00	35.55	111
DUM70230	DUMAS #TR31 TROJAN CRUISER	60.00	44.95	111
DUM70235	DUMAS #TU24 SHELLY FOSS 24 IN.	41.00	32.40	111
DUM70240	DUMAS #TU36 SHELLY FOSS 36 IN.	75.00	56.25	111
DUM70250	DUMAS #AB1 SWAMP BUGGY	30.00	24.60	111
DUM70255	DUMAS #AB2 LIL SWAMP BUGGY	13.00	11.45	111
DUM70260	DUMAS BIG SWAMP BUGGY	31.00	25.40	108
DUM70310	DUMAS #AVL1 ATLAS VAN LINES	11.00	9.70	110
DUM70315	DUMAS #AVL40 ATLAS VAN LINE 40	53.00	39.75	110
DUM70318	DUMAS #1312 AVL U-76 HYDRO	50.00	37.50	108
DUM70319	DUMAS #1314 ATLAS VAN LINE U-1	47.95	37.95	108
DUM70320	DUMAS #PP20 PAY N PAK	38.00	31.15	110
DUM70325	DUMAS #SK1 SK-DADDLE	42.00	33.20	110
DUM70330	DUMAS #SKV10 VEE BOT. SK-BOAT	16.00	14.10	110
DUM70340	DUMAS #DV10 DEEP VEE 10 MAHOG	11.00	9.70	110
DUM70345	DUMAS #DV20 DEEP VEE 20 PLYWD	30.00	24.60	110
DUM70350	DUMAS #DV40 DEEP VEE 40 PLYWD	47.00	37.15	110
DUM70355	DUMAS #DV60 DEEP VEE 60 PLYWD	65.00	48.75	110
DUM70360	DUMAS #DV20CF COMP DV 20 FIB.	78.00	58.50	110
DUM70365	DUMAS #DV40CF COMP DV 40 FIB.	92.00	68.95	110
DUM70370	DUMAS #DV60CF COMP DV 60 FIB.	100.00	74.95	110
DUM70371	DUMAS #1421 COMP DEEP VEE 21	42.95	33.95	108
DUM70400	DUMAS HOT SHOT 24'' TUNNELHULL	30.00	22.50	108
DUM70401	DUMAS #1315 DRAG N FLY 20 MKII	39.95	31.95	108
DUM70413	DUMAS #1313 HOT SHOT 21(GLASS)	67.95	49.95	108







IMPORTANT!

PRICES FOR ALL DUMAS ITEMS (PAGES 108 THROUGH 113) ARE LISTED ON THIS PAGE.

Hot Shot

Get on the water quick with HOT SHOT, the Little Tunnel Hull for the 3.5cc outboard — easy to build, bolt on engine, install radio (2 channel), and go racing. Birch and mahogany plywood construction kit. Turn fin included. Length 24" (61 cm) Beam 12" (30.5 cm)

KIT #1311 Engine and radio not included

Big Swamp Buggy

Flyers — get into model boating the easy way with the BIG SWAMP BUGGY -- run your .40 or .60 engine and prop. Start it as you do an airplane and have yourself a ball — even run it up on shore. Rugged and stable. Length 31" (78 cm) Beam 17.5" (44 cm)
Mahogany and birch plywood construction kit.

KIT #1505 Engine and radio not included

Atlas Van Lines U-76

The 1976 Unlimited Hydroplane National Champion — Atlas Van Lines U-76, driven by Bill Muncey, the top unlimited driver of all times — now in kit form for you to build. For all-out competition in the Sportsman Class or to run for fun. Length 36" (91 cm) Beam 18" (46 cm). Use hardware kit #2328.
Birch and mahogany plywood construction kit.

KIT #1312 Engine, radio and running hardware not included

dumas boats

DUMAS

NOTE: Several of the kits listed in the boats section require running hardware packages. These running hardware kits contain everything needed to complete the boats, except where listed. Except where noted, each package contains the appropriate shaft, stuffing box, engine mounting plate, flywheel, propeller, rudder assembly, water pick-up, universal joint, washers, nuts and collars.

Hot Shot 21

A larger HOT SHOT TUNNEL HULL with a pickle fork bow. Longer and wider and more stable. A fun boat that's very competitive. For a 3.5 cc outboard. An easy-to-build fiberglass kit. Bolt on the engine, install a radio (2 channel) and go!
Length 27" (69 cm) Beam 14" (36 cm)

KIT #1313 Engine and radio not included.



Atlas Van Lines U-1

If Hydros turn you on, here's the latest. A miniature of the new Atlas Van Lines Unlimited Hydroplane driven by Bill Muncey. For radio-controlled racing in the Sportsman class with you driving! A birch and mahogany plywood construction kit.
Length 36" (91 cm) Beam 16" (41 cm)
Use hardware kit #2328.

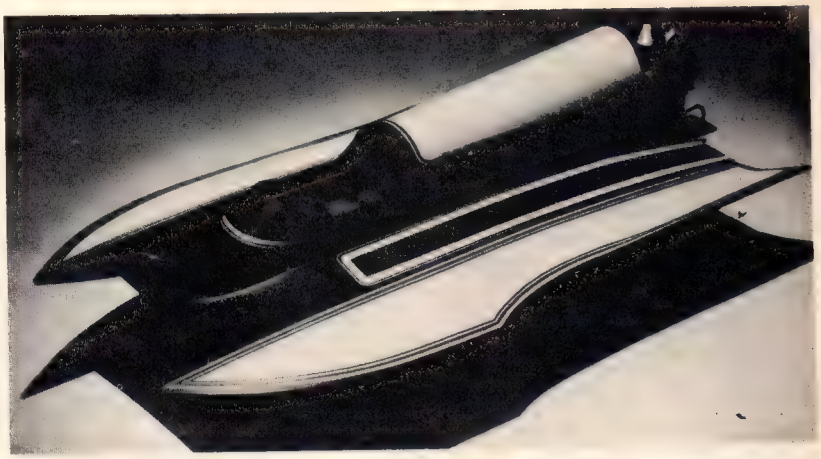
KIT #1314
Engine, radio and running hardware not included.



The Drag'n Fly 20 Mark II

More fun with the Drag'n Fly 20, modified for the 3.5 cc outboard. Complete with material for the cowl and instructions for pickle forking the bow if you wish. Can also be run with an inboard 3.5 cc engine with #2317 hardware.
Length 28" (71 cm) Beam (36 cm)

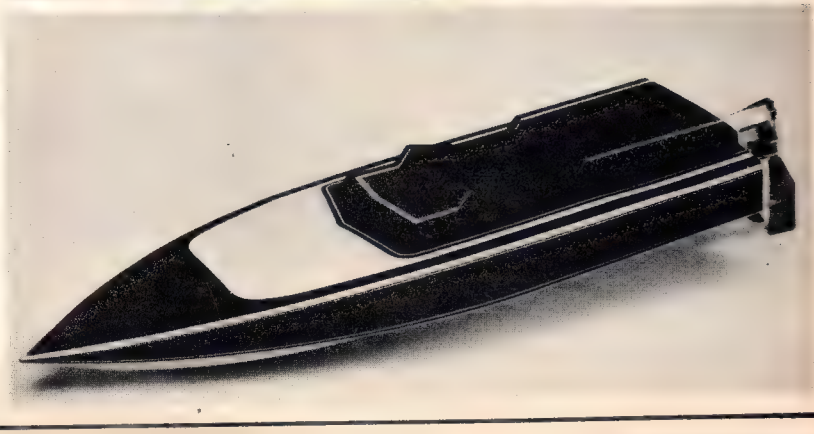
KIT #1315
Engine, radio and running hardware not included.



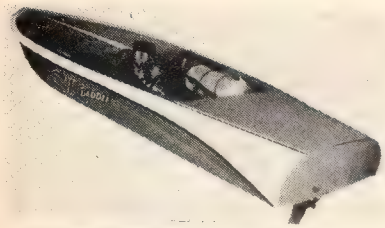
Competition Deep Vee 21

Another Deep Vee for the Dumas Fleet! Designed for racing with a 3.5 cc engine to handle rougher water than the Competition Deep Vee 20. A mahogany and birch plywood construction kit.
Use outdrive kit #2321.
Length 30" (76 cm) Beam 11" (28 cm)

KIT #1421
Engine, radio and running hardware not included.



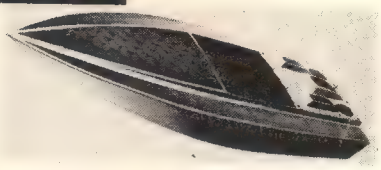
DUMAS



SK-DADDLE #DUM70325
Length: 36" Beam: 14"
A hot running model of the Hallet SK boat for full bore racing. Comes with all pre-cut parts and features birch plywood construction.



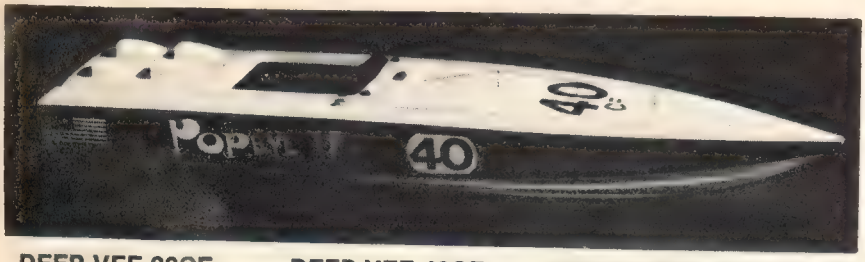
DEEP VEE 20 #DUM70345
Length 24" Beam 8"
This small but speedy racer is all wood, rugged enough to take the bumps. Enough room for easy installation.



DEEP VEE 40 #DUM70350
Length 32" Beam 11"
Made of mahogany and birch plywood. Can accommodate a .29 to .45.



DEEP VEE 60 #DUM70355
Length 38" Beam 14"
Engine .40 to .80
This one can really take the rough water. Mahogany and birch.



DEEP VEE 20CF #DUM70360
Length 30"
Engine .20

DEEP VEE 40CF #DUM70365
Length 40"
Engine .40

DEEP VEE 60CF #DUM70370
Length 45"
Engine .60

These fiberglass Deep Vee's are for serious competition. The hull and deck are white so they can be prototypically painted. The ultimate in Dumas racing boats.



ATLAS VAN LINES #DUM70310
Length 18" Engine .049

ATLAS VAN LINES 40 #DUM70315
Length 36" Engine .40

Both are scale models of the famous unlimited hydro. Mahogany and birch.



SKE VEE 10 #DUM70330
Length 18" Beam 7"
Engine .049-.051
A little Deep Vee Bottom Ski Boat for fun or racing with RC. Unassembled mahogany and birch kit.



DEEP VEE 10 #DUM70340
Length 18" Beam 6"
Engine .049
Inexpensive fun with this small Deep Vee. Runs like the big ones in rough or smooth water. Mahogany, plywood and veneer.

Outdrive for DV-10 and SKV-10

Make a little racing boat out of your DV-10 or SKV-10 with the new flex cable outdrive for .09 and .10 marine engines. Complete hardware kits.

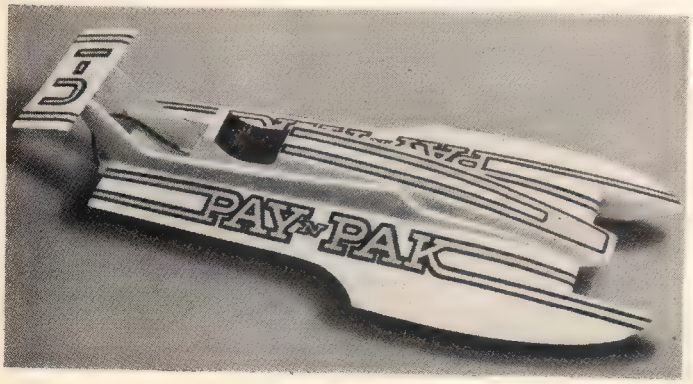
Kit for .10 engine with 3/16" shaft and 10-32 threads (similar to OS MAX 10) KIT #2326

Kit for .09 engine with 5mm shaft and 5mm threads (similar to Enya .09) KIT #2327



Heavy Duty Outdrive

for 60 and 65 engines using 3/16" flex cable. Prop, engine coupling and flywheel not included.
KIT #2325



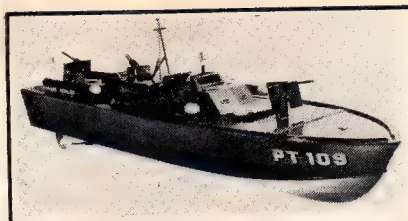
*SEE PAGE 108 FOR DUMAS PRICES

LISTED BELOW IS THE RUNNING HARDWARE PACKAGE REQUIRED TO COMPLETE EACH KIT.

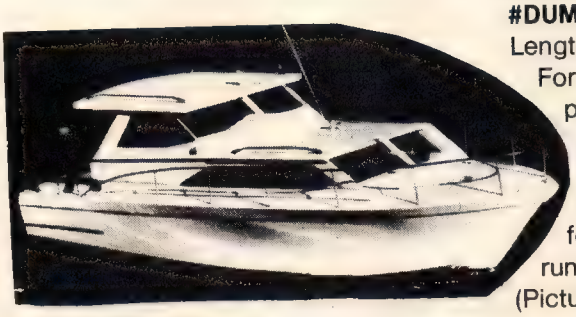
BOAT KITS	HARDWARE PACKAGE
ATLAS VAN LINES	#2306
ATLAS VAN LINES 40	#2315 plus prop & flywheel
DEEP VEE 10	#2314, 2326, or 2327
DEEP VEE 20	#2309
DEEP VEE 40	#2321
DEEP VEE 60	#2321
DEEP VEE 20 CF	#2309
DEEP VEE 40 CF	#2321
DEEP VEE 60 CF	#2321
PAY'N'PAK	#2322
SK-DADDLE	#2301
SKE VEE 10	#2314, 2326, or 2327

PAY 'n PAK #DUM70320
Length 30" Beam 15" Engine .20
A standoff scale model of the national unlimited hydroplane champion. Rugged plywood construction.

DUMAS



PT109 **#DUM70210**
Length 33" Beam 9"
Engine .19 or electric
Put some history in your modelling! Die cut mahogany plywood. See the accessory section for a choice in hardware packages.



TROJAN CRUISER
#DUM70230
Length 31"
For gas or electric power. All deck hardware included. A beautiful model for RC, free running or display. (Pictured at left).



U.S. COAST GUARD LIFEBOAT #DUM70220
Length 33" Beam 9"
Engine: Electric
For the modeler who likes to build. Mahogany plywood frame, 1/8" balsa planking.



THE TUNA CLIPPER **#DUM70225**
Length 37" Beam 6½"
Plywood construction with mahogany planking. Complete with deck hardware. For RC use with single electric motor.



40' U.S. Coast Guard Utility Boat

A new wood construction kit of the popular 40-foot U.S. COAST GUARD UTILITY BOAT for the scale builder. Die-cut plywood parts, hull is strip planked. Deck hardware is included. (Kit replaces Dumas S-100). Length 35" (89 cm) Beam 10" (25 cm)



SHELLEY FOSS TUGBOAT
#DUM70240
Length 36" Beam 12"
Engine: Twin Electric

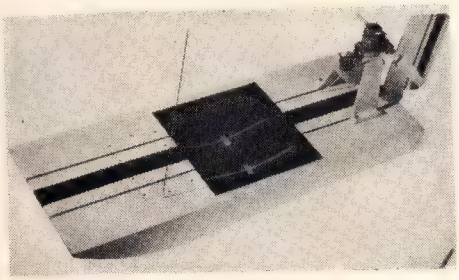
LITTLE SHELLEY FOS
#DUM70235
Length 24"
Engine: Single Electric
Both include deck hardware and have mahogany plywood.

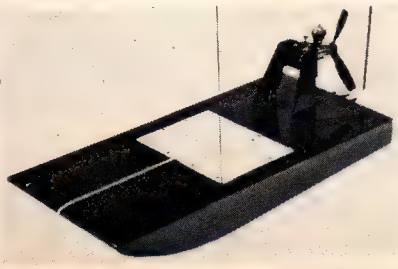


Dauntless

A real beauty. One of the famous commuter boats used on the Hudson River in New York. Originally run with Packard marine engines, now powered by Diesel engines. Designed by Sparkman and Stephens in 1946. Now you can build your own commuter boat. This is a big boat! Plenty of room for gas or electric power with twin screws. Wood construction kit with deck hardware included. Scale 3/4":1'.
Length 49½" (126 cm) Beam 14" (36 cm)

SWAMP BUGGY
#DUM70250
Length 28" Beam 10"
Engine .19
A fun boat in any kind of water. Run it on ice, snow, through the weeds—anywhere.





LI'L SWAMP BUGGY
#DUM70255
Length 18" Beam 8"
For free running or radio control. All birch plywood and mahogany. For .049 engine.

BOAT KIT	REQUIRED HARDWARE PKG.
PT 109	#2310, flywheel & water pickup
SHELLY FOSS TUGBOAT	#2312
LITTLE SHELLY FOSS	#2313
DAUNTLESS	AVAILABLE SOON
TROJAN CRUISER	#2311
U.S.C.G. LIFE BOAT	#2311
40' U.S.C.G. UTILITY	#2329

DUMAS



BINGO **#DUM70125**
Length 50" Beam 10"
Sail Area 800 sq.in.

A winner in the 50/800 class. Unassembled fiberglass hull, deck, rudder, and keel. Beautiful dacron sails with a mast of 80 in. Fittings included, but needs sail control unit.



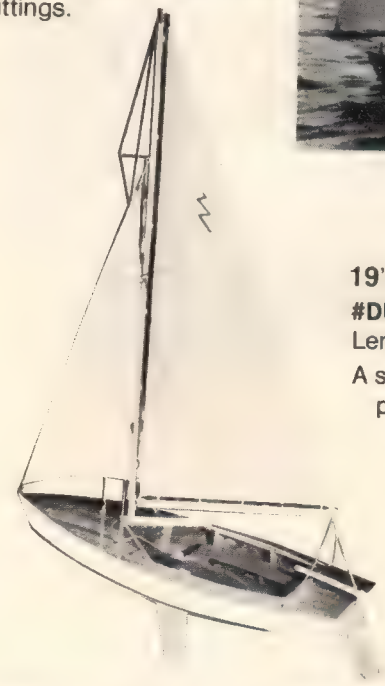
ETCHELLS 22 **#DUM70130**
Length 50" Beam 10"
Sail Area 800 sq.in.

A semi-scale model of the popular Etchells 22. A boat for fun or competition in the 50/800 class. All fiberglass and unassembled. Fittings and dacron sails included. Mast measures 62 in.

EQUATION (shown rt)
#DUM70120
Length 36" Beam 8"
Sail area: 600 sq.in.
Mast 44"

A semi-scale model of the famous ocean racer designed by Bill Barton to race in the 36/600 class. Unassembled, all fiberglass, complete with dacron sails and fittings.





19' LIGHTNING
#DUM70140
Length 19"

A scale model of the popular lighting class sailboat. Well suited for display or free sailing. Easy to build.



STAR 30 (shown left)
#DUM70110
Length 30" Beam 8"
Sail area 430 sq.in.

Kit consists of mahogany plywood frames, with 1/12" planking and deck. Built up spruce mast is 44" high. Ready made sails. Great for 2 channel radio control.

SEE PAGE 108 FOR DUMAS PRICES.



Huson 36

Here's a model of an ocean racing sailboat. Looks like one of the big ones. Can be raced in the 36/600 class of the American Model Yacht Association, or sailed for fun and relaxation. Hull and deck are white fiberglass for the modeler to join. The kit also includes keel with weight, rudder, dacron sails, wood to shape for mast and boom, and all hardware. Designed for the Dumas-Probar Sail Control unit Length 36" (91 cm) Beam 10" (25.4 cm) Mast 48" (122 cm)

KIT #1113



SAIL CONTROL UNIT
#DUM20290
Length 5.1" Width 2.0"
Height 2.7"

A single motor-driven arm type unit to adjust position of main and jib sails. Controlled by a single servo. Powered by receiver batteries or by separate 4.8 volt batteries.

This unit can be used on any of the sailboats on this page except the Lightning.

DUMAS

DUMAS/PITTMAN ELECTRIC MOTORS

Dumas Pittman "Boatmaster" motors are accepted as the standard of the hobby field. Well established as the highest quality model boat motors available, their power and smooth operation is truly superior. Available in both 6 volt and 12 volt DC versions, Dumas/Pittman motors are enclosed in a corrosion resistant metal housing, and are complete with universal coupling for ⅛" shaft,

For throttle control on your elcectric powered boat use Dumas No. 503 electric speed control.

DUM22000	DUMAS #CJ012 COOL JACKET-COX	3.50	3.30
DUM09060	DUMAS #506 FITTMAN MOTOR 6V	27.50	21.95
DUM09120	DUMAS #507 FITTMAN MOTOR 12V	27.50	21.95
DUM15030	DUMAS #503 SPEED CONTROL	22.95	19.50





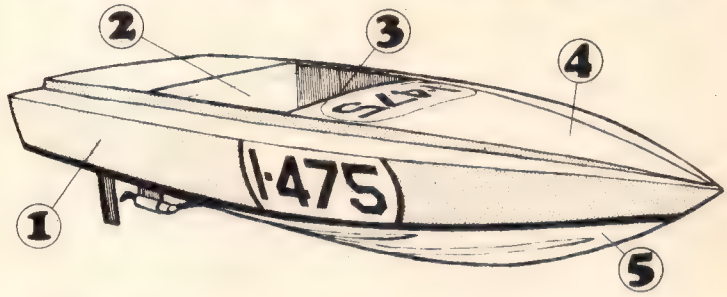
CJ-012 Water cooling clamp to attach around cylinder to convert Cox .049-.051 to marine engine.

The No. 506 motor will operate on three or four size 'D' flashlight cells connected in series, a rechargeable nickel-cadmium battery pack of 4.5 or 6 volts output, or from a miniature 6 volts storage battery. The No. 507 motor is best powered by a nickel-cadmium battery pack of 9 to 12 volts output or a small 12 volt motorcycle type storage battery. Motor may be reversed by interchanging battery leads.

GENERAL SPECIFICATIONS

- Ceramic Lifetime Magnet
- Stainless Steel Shaft
- Self Aligning, Oil Impregnated Bronze Bearings
- Neoprene Shock Insulated Mounting
- Long Life Copper Graphite Brushes
- Double Insulated Armature Windings, Impregnated and Baked
- Fully Enclosed Corrosion Resistant Metal Housing
- Weight 8¾ Ounces

How to build better boats



1 Construct wooden hulls with any of the three formulas of Hobbypoxy glue. They're all waterproof, vibration proof and fuel proof. (Not "resistant" . . . PROOF!) They are by far the strongest glues you can use on wood-to-wood joints, and will never crack or become brittle.

2 Install motor mount beams and bulkheads in fiberglass hulls with Hobbypoxy Quick-Prep polyester resin and Easy-Does-It cloth. Quick-Prep is a surfacing *and* laminating resin, bodied with Cab-o-Sil to make it viscous. It costs only $5.25 per quart, including catalyst and a polyethylene overcap/mixing container. Easy-Does-It cloth is a Dynel fabric that's as strong as fiberglass, but drapes better, doesn't unravel or fray, and *doesn't itch!*

3 Vibration-proof all set screws, nuts and bolts with Hobbypoxy glue. This is especially important with engine mounts since heat has an adverse effect on some types of thread-locking compounds.

4 Seal and surface wooden hulls with Quick-Prep or Hobbypoxy Formula 2 glue. The glue is tougher and more flexible than polyester resin, and adds strength to the structure. Both are perfect bases for Hobbypoxy enamels.

5 Finish glass or wood boats, inside and out, with Hobbypoxy enamels. Hobbypoxy is the toughest of all epoxy paints, and is virtually impervious to scuffs and scratches caused by beaching and other rough handling. It's completely fuel proof too, and comes in more standard colors than any other epoxy model paint.*

[Note: Hobbypoxy epoxy glues *will* adhere perfectly and cure normally when applied to polyester resins (fiberglass laminates), but polyester resins will not cure when applied over epoxies. Bear this in mind when building and finishing your boat.]

*Send for a free color card and we'll throw in a copy of our Hobbypoxy Painting Pointers booklet. Write the word "boat" on your request.

HOBBYPOXY PRODUCTS

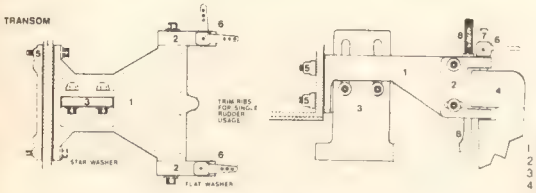
A Division of Pettit Paint Co., Inc.
40 Pine Street, Rockaway, N.J. 07866

K & B MARINE

HBR OUTDRIVE ASSEMBLIES

The HBR, a heavy duty Rudder Assembly is an example of K & B Marine Specialties' success in designing and engineering hardware for model boats. The adaptability of the HBR unit is almost without limit. It gives the model boat designer a freedom of choices which allow him to design a boat that will have a cleaner underwater drive system, an adjustable thrust line for optimum performance, and double or single rudders which can be offset either right or left. Features such as the adjustable Pivot Bracket for the the Rudders give control to change the attitude of the boat through the turn. Offsetting the Rudder Blades keeps them away from disturbed water caused by the rotation of the propeller blades, thereby making the Rudder more responsive. The HBR unit has been especially designed with Deep Vees in mind and constructed to withstand the high torque of the Schnuerle-ported engines.

The HBR has also been especially adapted to the 3/16 heavy duty Flex Cable Drive System.



1 MASTER BRACKET
2 PIVOT BRACKET
3 STRUT
4 RUDDER
5 RETAINER PLATES
6 CONTROL ARMS
7 PIVOT PIN
8 WATER PICK-UP

HBR SINGLE RUDDER OUTDRIVE ASSEMBLIES

1030 HBR-140 Rudder Outdrive Assembly .40 Single Rudder
Includes:
1226 2ARB Rudder Blade .40

1034 HBRS-140 Safety Shear Outdrive Assembly .40 Single Rudder
Includes:
1228 SSRB-40 Safety Shear Rudder Blade .40

1031 HBR-160 Rudder Outdrive Assembly .60 Single Rudder
Includes:
1227 3ARB Rudder Blade .60

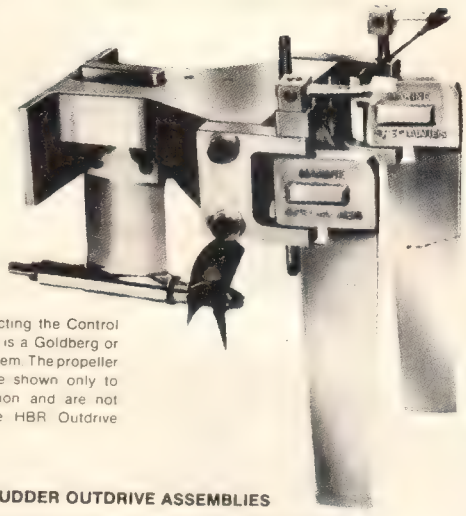
1035 HBRS-160 Safety Shear Outdrive Assembly .60 Single Rudder
Includes:
1229 SSRB-60 Safety Shear Rudder Blade .60

HBR RUDDER OUTDRIVE ASSEMBLIES 1030, 1031, 1034 & 1035

Above Assemblies include:

1016 131 Control Arm (1 Ea.) with **1300** Set Screws 8-32 thread
1101 VOA-WP Water Pick-up with **1359** Hex Nuts
1212 RT-5 Retainer Plates 5" threaded 8-32 (2 Ea.)
1222 HBR-MB Master Bracket
1223 HBR-PB Pivot Bracket
1238 HBR-S Strut with **1188** Oilite Bushings 7/32"
1252 2/3PPL Long Pivot Pin
1200 NB Nylon Bushings (2 Ea.)
1291 FW-8 Flat Washers
1295 SW-8 Star Washers
1308 SHC 8-32 x 3/4" Screws
1309 SHC 8-32 x 1" Mounting Screws

HBR DOUBLE RUDDER OUTDRIVE ASSEMBLIES



The tie-bar connecting the Control Arms in the photo is a Goldberg or Du Bro linkage system. The propeller and stub shaft are shown only to demonstrate position and are not included with the HBR Outdrive Assemblies.

HBR DOUBLE RUDDER OUTDRIVE ASSEMBLIES

1032 HBR-240 Rudder Outdrive Assembly .40 Double Rudder
Includes:
1226 2ARB Rudder Blades .40 (2 Ea.)

1036 HBRS-240 Safety Shear Outdrive Assembly .40 Double Rudder
Includes:
1228 SSRB-40 Safety Shear Rudder Blades .40 (2 Ea.)

1033 HBR-260 Rudder Outdrive Assembly .60 Double Rudder
Includes:
1227 3ARB Rudder Blades .60 (2 Ea.)

1037 HBRS-260 Safety Shear Outdrive Assembly .60 Double Rudder
Includes:
1229 SSRB-60 Safety Shear Rudder Blades .60 (2 Ea.)

HBR DOUBLE RUDDER OUTDRIVE ASSEMBLIES 1032, 1033, 1036 & 1037

Above Assemblies Each include:

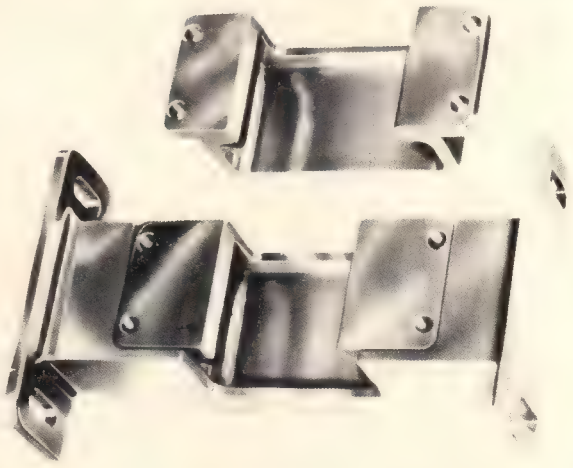
1016 131 Control Arms (3 Ea.) with **1300** Set Screws 8-32 thread
1101 VOA-WP Water Pick-up with **1359** Hex Nuts
1212 RT-5 Retainer Plates threaded 8-32 (2 Ea.)
1222 HBR-MB Master Bracket
1223 HBR-PB Pivot Bracket (2 Ea.)
1238 HBR-S Strut with **1188** Oilite Bushings 7/32"
1252 2/3PPL Long Pivot Pin (2 Ea.)
1200 NB Nylon Bushings (4 Ea.)
1291 FW-8 Flat Washers
1295 SW-8 Star Washers
1308 SHC 8-32 x 3/4" Screws
1309 SHC 8-32 x 1" Mounting Screws

MOTOR MOUNTS

"QUICK CHANGE" MOTOR MOUNT SET

The "QC", Quick Change Motor Mount, was designed for all types of hulls, including the Deep Vee, and can be rail mounted. It has uniquely versatile, interchangeable insert adapters that accommodate both .40 and .60 engines. The five inch "QC" Master Mount is installed permanently in the boat. The inserts attach to the Master Mount with Socket Head Cap Screws. If you are running a .40 engine, use the .40 insert. Need to make a switch? Simply remove four Socket Head Cap Screws, change over to the .60 insert, and, "Presto" you are ready to run again!

The inserts alone can be rail mounted in boats with confined engine placement areas.



"QC" MOTOR MOUNT SET

1008 QC Quick Change Motor Mount Set
The QC Motor Mount Set includes
1009 QC-MM Master Mount 5" (1 Ea.)
1010 QC-40 Insert Adapter for .40 engines (1 Ea.)
1011 QC-60 Insert Adapter for .60 engines (1 Ea.)
1212 RT-5 Retainer Plates 5" (2 Ea.)
1291 FW-8 Flat Washers (4 Ea.)
1309 SHC 8-32 x 1" Mounting Screws (4 Ea.)
1308 SHC 8-32 x 3/4" Screws for Inserts (4 Ea.)

1009 QC-MM Master Mount only
Includes
1212 RT-5 Retainer Plates 5" (2 Ea.)
1309 SHC 8-32 x 1" Mounting Screws (4 Ea.)
1291 FW-8 Flat Washers (4 Ea.)

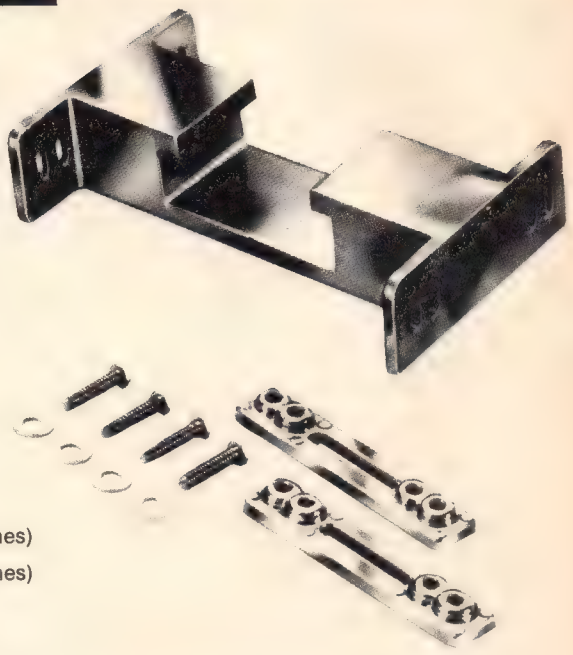
K&B14004	MARINE 1004 .19 MOTOR MT-4 IN.	5.50	4.95	115	K&B20030	MARINE 1030 HBR-140 OUTDRIVE	33.00	26.40	114
K&B14005	MARINE 1005 .40 MOTOR MT-4 IN.	5.50	4.95	115	K&B20031	MARINE 1031 HBR-160 OUTDRIVE	33.00	26.40	114
K&B14006	MARINE 1006 .40 MOTOR MT-5 IN.	6.60	5.95	115	K&B20032	MARINE 1032 HBR-240 OUTDRIVE	38.50	30.80	114
K&B14007	MARINE 1007 .60 MOTOR MT-5 IN.	6.60	5.95	115	K&B20033	MARINE 1033 HBR-260 OUTDRIVE	38.50	30.80	114
K&B14008	MARINE 1008 QUICK CHANGE MOUNT	19.80	15.80	114	K&B20034	MARINE 1034 HBRS-140 OUTDRIVE	34.00	27.20	114
K&B14009	MARINE 1009 MASTER MOUNT ONLY	8.80	7.95	114	K&B20035	MARINE 1035 HBRS-160 OUTDRIVE	34.00	27.20	114
K&B14010	MARINE 1010 INSERT ADAPTOR-.40	6.60	5.95	114	K&B20036	MARINE 1036 HBRS-240 OUTDRIVE	40.50	32.40	114
K&B14011	MARINE 1011 INSERT ADAPTOR-.60	6.60	5.95	114	K&B20037	MARINE 1037 HBRS-260 OUTDRIVE	40.50	32.40	114

K & B MARINE

MOTOR MOUNTS

The two cycle engines that are used in model boats run best when rigidly mounted, and for this reason, it is important to select the proper Motor Mount for the engine size and boat type. Most boat kit manufacturers provide for a side rail mounting of either four or five inch spacing, and K & B Marine Specialties provides a line of Motor Mounts that are engineered for this type of installation. The older type of plate mount is not as rigid as side rail mounting and, when secured to the boat rails with wood screws, is very unreliable - especially when the wood around the screws becomes soaked with oil and fuel. The standard Motor Mount, such as the 1006, is very suitable for flat bottom monoplane hulls, such as the ski boat type, and also three and four point hydroplane hulls. The slotted holes in the mounting flanges permit adjustment of the engine shaft to bring it into alignment with the propeller shaft.

All the Motor Mounts are die-cast of high grade aluminum alloy, making them light, strong, and rigid. They have been designed for reliability. You can be sure that all Motor Mounts manufactured by K & B Marine Specialties have mounting spaces that will accommodate the crankcase of the specific engine size for which they are manufactured.



1004 194 Motor Mount (4" for .19 engine)

1005 404 Motor Mount (4" for .40 engine)

Above Assemblies include:
1211 RT-4 Retainer Plates 4" (2 Ea.)
1291 FW-8 Flat Washers (4 Ea.)
1305 HHC 8-32x1" Mounting Screws (4 Ea.)

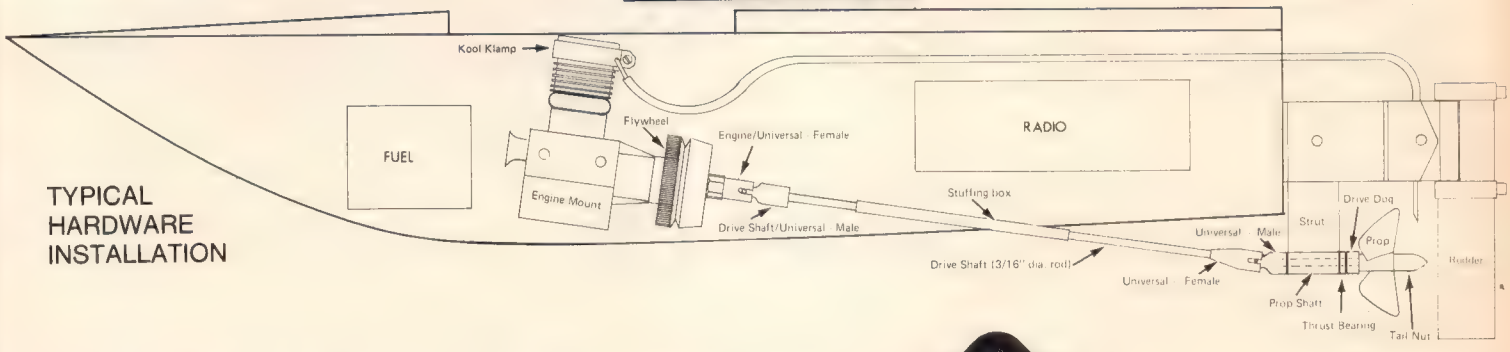
1006 405 Motor Mount (5" for .40 engines)

1007 605 Motor Mount (5" for .60 engines)

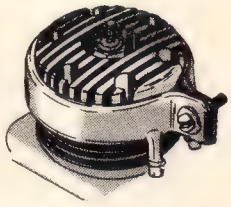
Above Assemblies include:
1212 RT-5 Retainer Plates 5" (2 Ea.)
1291 FW-8 Flat Washers (4 Ea.)
1305 HHC 8-32 x 1" Mounting Screws (4 Ea.)

OCTURA

TYPICAL HARDWARE INSTALLATION

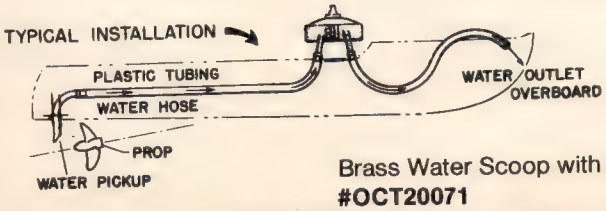


OCTURA KOOL KLAMP



An inexpensive means to efficiently and quickly convert any model airplane engine to R/C marine use. Leaves glow plug readily accessible - no possibility of water leaking into engine. No modification of engine necessary! 15 sizes are available to equip any of the popular engines. To determine size: measure the diameter of the cylinder head. The number of 1/16ths over 1" is the size number. (i.e. 1 5/8" diameter = 10/16 = size 10; 1 3/4" diameter = 6/8" = 12/16" = size 12, etc.)

See the price listing section under OCT... for stock numbers and prices.





Brass Water Scoop with adjustable depth
#OCT20071

When gas engines are used, make sure you use either a water cooled marine engine or an air cooled engine with a water cooling jacket

OCT20000	OCTURA KOOL KLAMP #0	5.50	5.10
OCT20010	OCTURA KOOL KLAMP #1	5.50	5.10
OCT20020	OCTURA KOOL KLAMP #2	5.50	5.10
OCT20030	OCTURA KOOL KLAMP #3	5.50	5.10
OCT20040	OCTURA KOOL KLAMP #4	5.50	5.10
OCT20050	OCTURA KOOL KLAMP #5	5.50	5.10
OCT20060	OCTURA KOOL KLAMP #6	5.50	5.10
OCT20070	OCTURA KOOL KLAMP #7	5.50	5.10
OCT20071	OCTURA BRASS WATER SCOOP #71	1.85	1.80
OCT20080	OCTURA KOOL KLAMP #8	5.50	5.10
OCT20090	OCTURA KOOL KLAMP #9	5.50	5.10
OCT20100	OCTURA KOOL KLAMP #10	5.50	5.10
OCT20110	OCTURA KOOL KLAMP #11	5.50	5.10
OCT20120	OCTURA KOOL KLAMP #12	5.50	5.10
OCT20130	OCTURA KOOL KLAMP #13	5.50	5.10
OCT20140	OCTURA KOOL KLAMP #14	5.50	5.10

MIDWEST

KLAMPON KAI

Engine 3.5 c.c. outboard. Length 31 inches. Beam 13 inches. Radio 2 Channel. Designed by Charles E. Pottol. A Tunnel Hull Boat for 3.5 c.c. outboard engines. Sport or competition running. Simple aircraft quality plywood structure rapidly built on jig provided. Fast and Stable – an ideal trainer. KIT CONTENTS: precision cut aircraft grade plywood parts, precision strip wood, shaped building jig block, machine screws, nuts and washers, sponge rubber radio hatch gasket, decals, illustrated step-by-step assembly instructions with radio installation details, running and trimming instructions.
Kit No. **900**



MID70900 MIDWEST 900 KLAMPON KAI OUTBRD 44.95 31.45

MRC

With Turbo Trol you can run the craft aground and still not damage prop shaft or rudder—because there is neither. Turbo Trol replaces prop and rudder assemblies. It offers model boaters an ability to run in reverse or brake in an instant. Sharp turns become an everyday reality. Complete with ball bearing, bronze bushing to support shaft, it features its own water outlet for supplying cooling water to engine. Made to fit .30 through .60 size engines.

MRC17000 MRC TURBO TROL WATER JET 59.95 49.95

TURBO TROL

The water jet propulsion system that offers modelers maneuverability and control even in the most treacherous or stump filled waters.



STERLING

STE70026 STERLING B-26 PUDDLE JUMPER 16.95 12.75
STE70027 STERLING B-27 PUD. JUMPER MKII 39.95 29.95



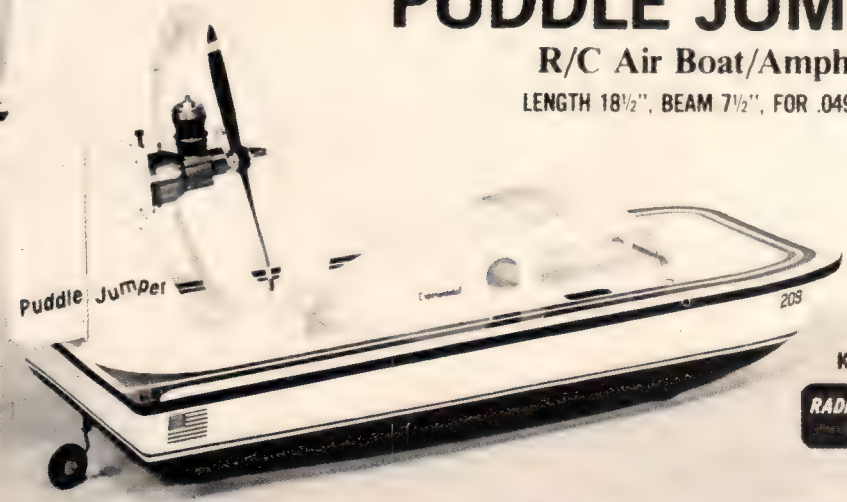
MK II
PUDDLE JUMPER

Designed for 2 channel R/C or tether control and .15 to .35 engines. Maintaining top quality and simple construction. All balsa and plywood parts are accurately die-cut, with precision vacuum formed plastic hull and cabin. Hardware package including R/C hardware. Full sized plans, plus decals for Sport model or Coast Guard version.

PUDDLE JUMPER

R/C Air Boat/Amphibian

LENGTH 18½", BEAM 7½", FOR .049 ENGINES



Kit B-26

RADIO CONTROL MODEL

Designed expressly for 2 channel R/C (plenty of room for just about any R/C) and .049 throttle control engine, this amazing air boat/amphibian will give you more pure pleasure than you can imagine — it's equally at home in a swimming pool or pond as well as a school yard or any smooth surface.

. . . And it's so easy to build — both the rugged plastic hull and cabin are precisely formed. Main inner structure and deck are accurately die cut plywood as is the balsa. Included is nylon motor mount — easy to follow step by step plans, decals, hardware etc.

STEVE MUCK'S



COMPETITION PROVEN LIL LIGHTNING

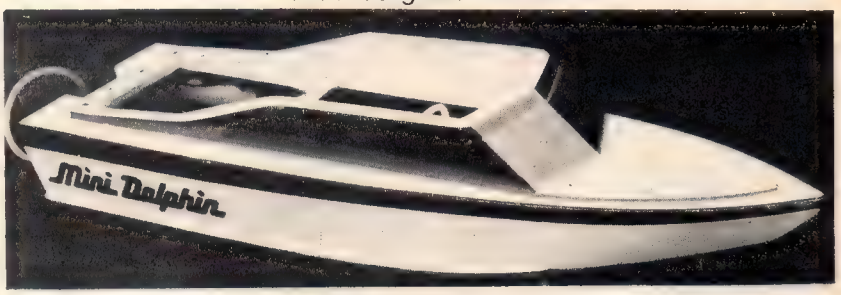
The LIL Lightning Tunnel Outboard was designed for the K&B 3.5CC Outboard Engine by George Campbell. The hull comes in two versions. For the builder who likes to work with wood the kit comes with all quality aircraft plywood, and fiberglass rear cowl. The second version is the all fiberglass hull, complete with fiberglass radio box. Both kits include plexiglass radio box lid, screws, turn fin and detailed instructions. Both models fit the new K&B Auto-trim.

Length ..... 30"
Width ..... 12"
Construction Kit No. 53
All Fiberglass Kit No. 56

MINI DOLPHIN

A little inexpensive fun day cruiser. The Mini Dolphin uses .09-.15 R/C marine engines. The Mini-Dolphin is an all wood kit using aircraft plywood sheeting, with a radio box built in with plenty of room for any two channel radio. Kit includes plexiglass radio box lid, screws, turn fin and page after page of photographs and building hints. Kit also includes motor mount plate & engine blocks.

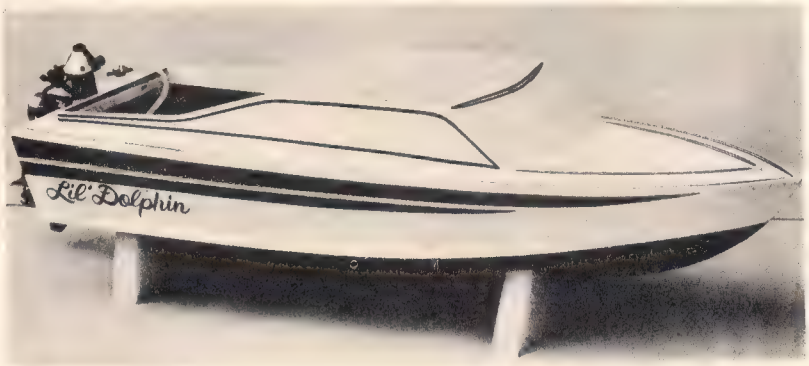
Length ..... 22"
Width ..... 7½"
Construction Kit No. 57
Uses Dumas Hardware Set #2326 or 2327.

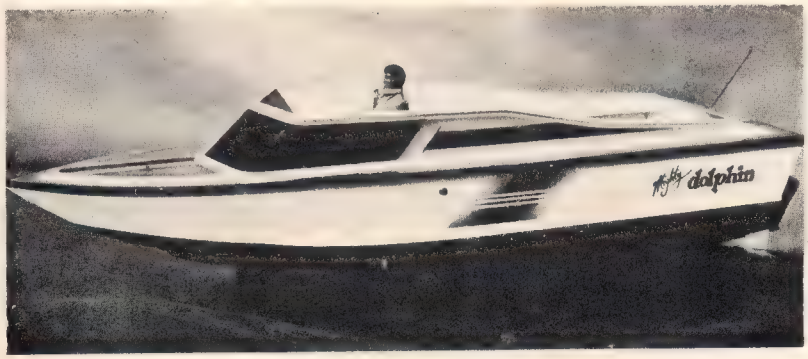


LIL DOLPHIN

A three and one fun boat of wood construction designed for the beginner. The kit can be made to fit the K&B 3.5CC Outboard, inboard engines up to 3.5CC, or electric systems. Quality aircraft plywood is used throughout the kit. Kit includes radio box, plexiglass radio box lid, turn fin and screws. Uses a two channel radio.

Length ..... 28½"
Width ..... 9½"
Construction Kit No. 55
Uses Steve Muck's Hardware Set No. 63





MIGHTY DOLPHIN

A Deep Vee day cruiser for fun or competition. Will handle any 6.5CC engine on the market today. This boat is made of quality aircraft plywood construction. Kit includes radio box, plexiglass radio box lid, turn fin and screws. The hull when completed, is both IMPBA and NAMBA legal for competition. This kit uses a 5" motor mount and fully adjustable stern drive available from Steve Muck's R/C Boats. Two channel needed.

Length ..... 36½"
Width ..... 11"
Construction Kit No. 59
Uses Steve Muck's Hardware Set No. 65

MUC20110	MUCKS #63 HARDWARE-LIL DOLPHIN	49.95	39.95
MUC20120	MUCKS #65 HRDWE-MIGHTY DOLPHIN	54.95	41.20
MUC70100	MUCKS #53 LIL LIGHTNING-WOOD	48.95	36.70
MUC70101	MUCKS #56 LIL LIGHTNING-GLASS	92.50	69.35
MUC70105	MUCKS #57 MINI DOLPHIN	26.95	22.95
MUC70110	MUCKS #55 LIL DOLPHIN	32.95	26.35
MUC70120	MUCKS #59 MIGHTY DOLPHIN	49.95	39.95

R/C CARS, TANKS, AND DUNE BUGGIES

If you're tired of picking up the broken pieces at the end of a day's flying then you may be ready to try radio control cars, tanks, or dune buggies. Lately, their popularity has taken a big jump, especially with the introduction of more and higher quality electric models. The electrics have the advantage of being quiet, smokeless, odorless, relatively inexpensive, and especially easy to operate, even for the youngest modeler.

For those of you who like something that can be run indoors, has moderate speed, and is inexpensive take a look at the following: MRC's Porsche 934 Turbo, Martini Porsche, and Tyrrell 6-wheeler; Cox's Lamborghini Countach; or Latrax's Alpha RCX and Mustang Cobra. All of these require dry-cell batteries, which need to be replaced rather frequently. In the long run you'll be dollars ahead if you convert to rechargable ni-cad batteries which are available options for all of these models.

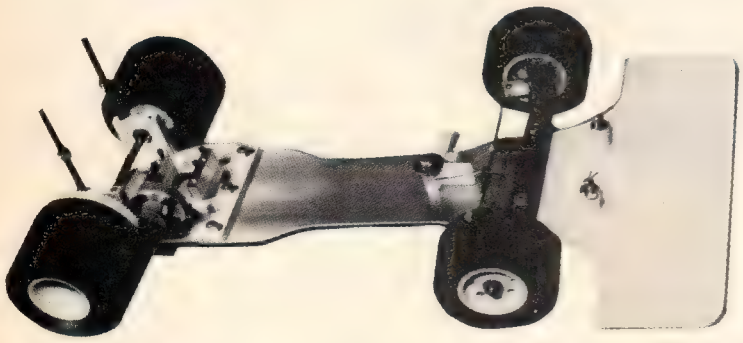
If you're competition-minded and enjoy racing there are several new high-quality units from which to choose. The Bolink Bolectric 6-cell ni-cad car has been the most popular among racers. Three new cars are now being released which should be excellent; the Cox Ferrari, the Peerless/Kyosho Porsche Turbo, and the Latrax Corvette which has a Latrax radio already installed. All of these racers mentioned are capable of 25 to 30 mph right out of the box. They will run for 15 to 20 minutes at full throttle between charges and most have quick-chargers that allow you to be back on the track again in 15 to 20 minutes.

In all-terrain vehicles we have MRC's 1/16 scale electric tanks which are very detailed in appearance, yet very rugged. We also have two gas-powered dune buggies; the Siguma-Ace (distributed by Leisure Electronics) and the Peerless/Kyosho Dash 7 Pop Buggy. The Leisure buggy is more expensive but also comes more pre-assembled and is probably at the top of the dune buggy field when it comes to competiveness and quality.

We also stock two of the most popular and competive gas-powered 1/8 scale R/C race cars. These are Associated's .19-.21 size RC 100 and RC 200 cars; these have completely dominated the field in the last couple of years. There are dozens of accessories and options that are available for these cars direct from Associated.

Overall, you have quite a variety of vehicles to choose from; each one having something unique to offer from the others. Pick one that you like and look forward to hours of enjoyment.

ASSOCIATED



(Plastic radio mount and linkages included but not shown)

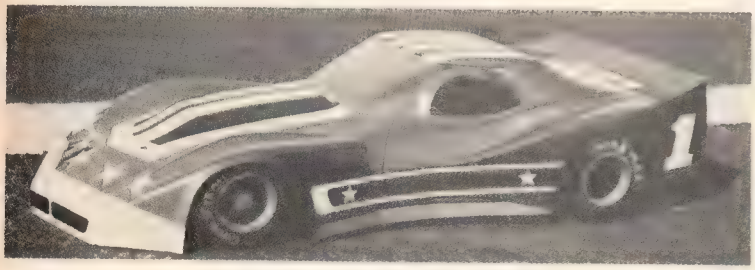
.19 SIZE RC 100 KIT



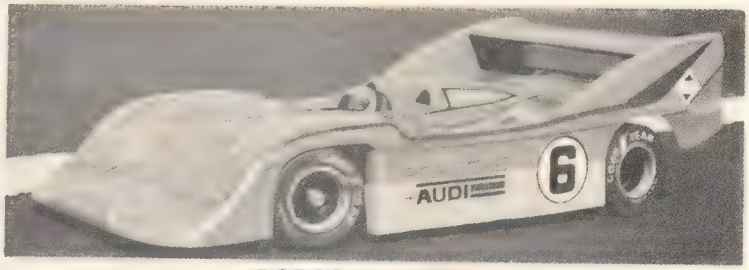
PICTURED READY-TO-RUN LESS BODY

ASSOCIATED'S new RC 100 Kit is the latest concept in 1/8 scale radio controlled car technology. Featuring a super strong rear power pod with 3/16" thick aluminum plate with rear axle aluminum pillow blocks containing precision ball bearings. Fully adjustable aluminum block motor mounts to accept any size pinion gear. Aluminum flywheel with heavy duty ball bearing clutch assembly. Extra large brake hub which attaches to the gear hub giving all the smooth braking force you'll ever need and also oil free. Racing designed front aluminum chassis plate engineered with the correct amount of chassis flex. The latest in front end assembly design featuring king pins inside the front wheels. Lexan front wheels with sponge tires. Nylon rear wheels with racing rubber. Plastic front bumper with body mounts. Kit also contains plastic for radio mounting tray and all throttle, brake and steering linkage, including steering servo saver. Complete illustrated instructions show you exactly how to assemble the car and tune it just like the team drivers. This kit includes everything but engine, body, radio, and tank.

The new 1/8 scale RC 200 Racing Kit is designed for the SERIOUS racer. The BEST car available anywhere. It features all racing components: ball-bearings for rear axle and clutch, fiberglass chassis, 8 mm. super-strong axle, aluminum front end, disc brakes, and a new servo saver. This car won the Sports and G.T. Classes at the 1977 ROAR NATIONALS and the first 7 places at the WORLD'S CHAMPIONSHIPS. This kit comes complete less engine, body and radio.



GREENWOOD CORVETTE



PORSCHE—30KL

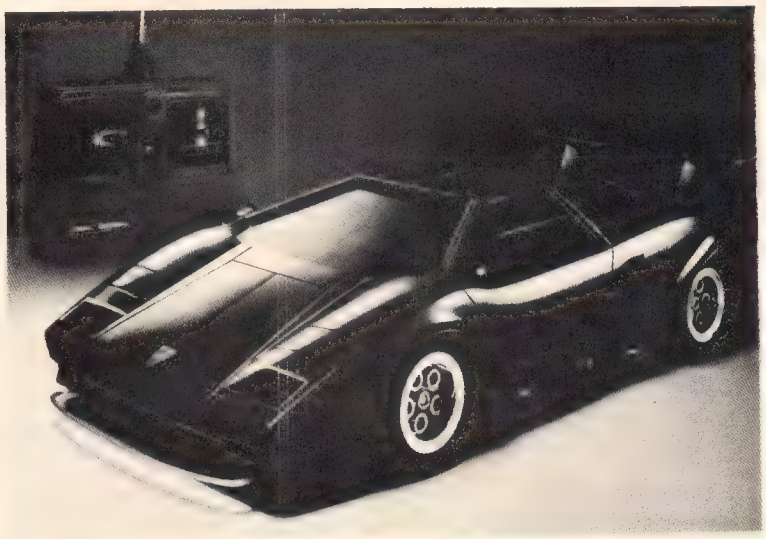
Pictured above are 2 of the most popular 1/8 scale car bodies. They are made of Lexan are nearly indestructible.

ASC94100	ASSOCIATED RC100 CAR KIT	125.00	99.95
ASC94200	ASSOCIATED RC200 CAR KIT	195.00	145.95

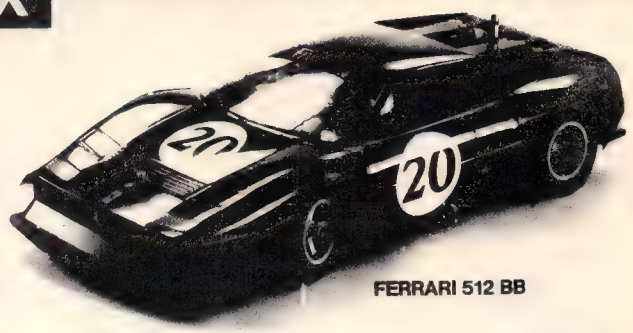
ASC95011	LEXAN 1/8 CAR BODY-PORCHE 30KL	19.95	16.95
ASC95021	LEXAN 1/8 CAR BODY-CORVETTE	19.95	16.95

COX

LAMBORGHINI COUNTACH LP500 WITH 2 CH. RADIO



This 1/12 scale model features a 2 channel radio system that features fully proportional speed control forward and reverse. The chasis is fully assembled with receiver and servos installed. The transmitter features the same precision stick assemblies used on our popular 8020 radio system. Uses 5 "C" size alkaline cells for motor power plus 10 "AA" cells for radio operation. Optional rechargeable nickel-cadmium battery pack (No. 900551) and Quick Charger (No. 900552) are available. License free operation on six 27 MHz frequencies.



FERRARI 512 BB

FEATURES

- Completely assembled chassis.
- Proportional speed controller—with forward and reverse functions.
- Hi-impact body with pre-painted finish. Durable decorative stickers are included.
- Popular .05 size motor and 6 cell rechargeable battery pack.
- Special sponge rubber racing tires.
- Extra gear sets included.

* Includes slow charger
* Speeds over 30 mph



* Requires 2 channel radio

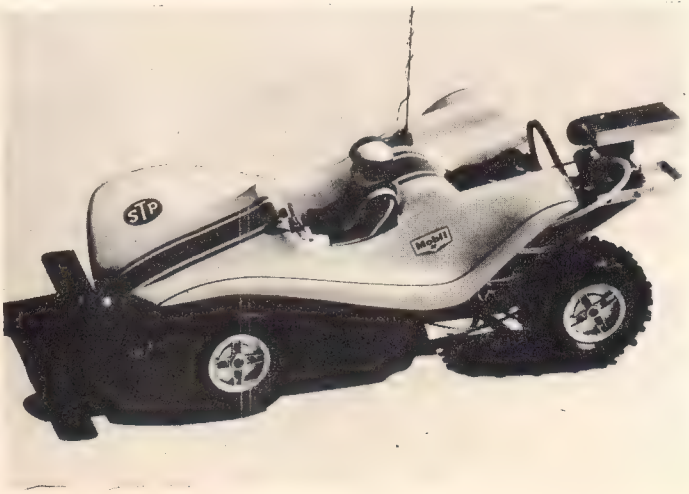
Quick Charger: Cat. No. 900552
This charger is designed to charge the 6 cell 1200 m.a.h. rechargeable battery pack included with the Cox Pro-series high speed racing cars. Operates from any automobile 12 volt lighter receptacle. Provides complete charge in less than 30 minutes. Wind up timer automatically times the charge.

COX90501	COX LAMB. COUNTACH & 2CH RADIO	129.95	109.95
COX90502	COX FERRARI 512BB ELECTRIC CAR	99.95	84.95
COX93551	COX 900551 NICAD BATTERY PACK	29.95	25.45
COX93552	COX 900552 NICAD QUICK CHARGER	19.95	16.95
COX93553	COX 900553 NIC BATTERY CHARGER	9.95	8.95

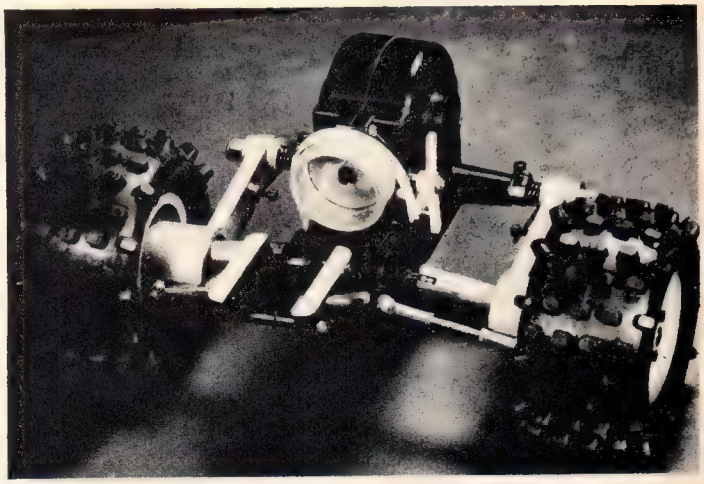
LEISURE ELECTRONICS

Here is the new 1/8 scale Siguma-Ace dune buggy distributed by Leisure Electronics. If you're tired of going in circles on a flat track with the normal R/C car and are ready for a big change of pace then this is for you. All that is required is any .19 size RC engine, a 2 channel radio, and a very minimal amount of assembly time and you're ready for ANY terrain and any challenger.

This unbelivably rugged kit comes with most of the important units pre-assembled at the factory which is big plus over other buggies on the market. It features an unbreakable plastic body which can be trimmed or used right out of the box. Its independent rear end suspension and high-traction pneumatic tires produce excellent cornering and allows the driver to tackle the roughest course imaginable. It requires a 2 channel radio with one servo used for steering and the other for throttle. The throttle servo is also hooked up to the brake band over the flywheel. When the throttle is in the idle position the brakes are applied. The brakes are very effective and will lock up the rear end, which makes it great for doing 180 degree spin-arounds. Overall it has to be the toughest, most versatile, most competitive, and most enjoyable vehicle made.



LEI90000	LEISURE 1/8 SCALE DUNE BUGGY	179.95	149.95



Factory assembled rear end for the Siguma-Ace requires only bolting to the chassis.

BOLINK



BOLECTRIC—ELECTRIC CAR

Electric cars are becoming more popular every day and Bolink cars are at the top of the field. For sport use or all-out racing they're unbeatable. These amazingly quiet and efficient electrics have a powerful 05 motor, lexan chassis, painted lexan body, rechargeable 6-cell ni-cad batteries, and charger. And, most important, is the full length, full protection Kydex plate so you'll survive the awful crashes you are bound to take. The charger that is included plugs into a car cigarette lighter and takes 20 minutes or less for a charge.

Add any 2 channel radio and this racer is ready for 25 mph speeds right out of the box. It is also available with a Futaba 2F radio already installed.

BOL90094	BOLINK 6-CELL ELECTRIC CAR	99.95	85.95
BOL90194	BOLINK 6-CELL CAR & FUTABA 2F	239.95	199.95

PEERLESS

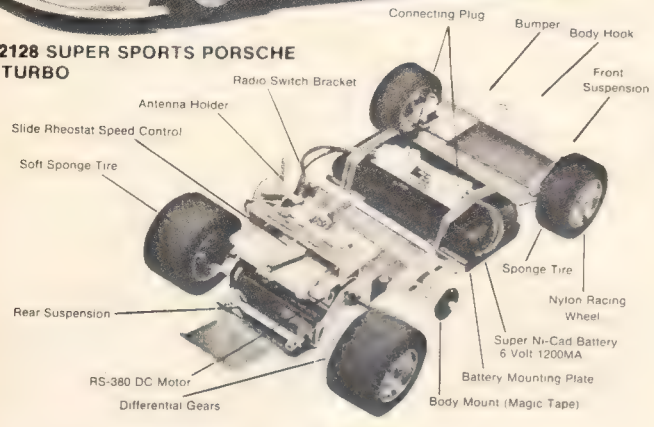
RADIO CONTROL ELECTRIC RACING CAR WITH HIGH POWERED DC MOTOR AND NI-CAD BATTERIES. FOR 2 CHANNEL 2 SERVO RADIO.

*CHARGER NOT INCLUDED

SPEED OVER 25 MPH



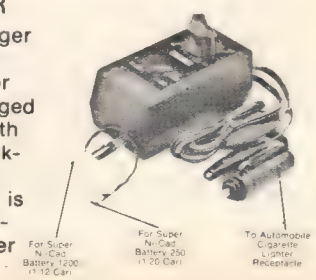
NO. 2128 SUPER SPORTS PORSCHE RSR TURBO



INCLUDES FACTORY ASSEMBLED CHASSIS WITH POWER DRIVE UNIT
POLYCARBONATE DIE-CUT, PRE-PAINTED BODY WITH DECAL ASSORTMENT
BUILT-IN PROPORTIONAL SLIDE RHEOSTAT SPEED CONTROL UNIT
SPECIAL DC MOTOR WITH DIFFERENTIAL GEAR SYSTEM

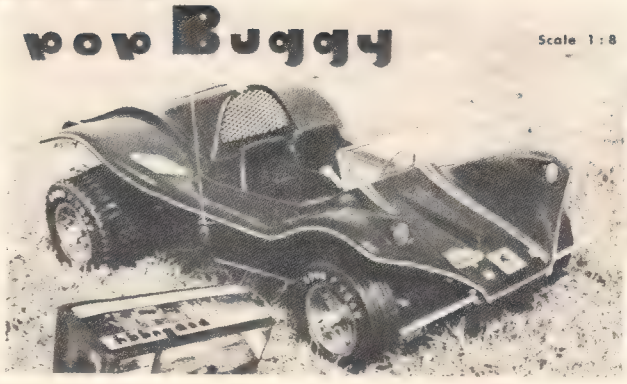
No. 2204 Ni-Cad QUICK CHARGER

The PEERLESS Super Ni-Cad Quick-Charger is a charger especially made to charge the PEERLESS Super Ni-Cad Batteries (250 for 1:20 car and 1200 for 1:12 car) and is charged by 12V battery. It has a 15 minute timer with safety resistance factor incorporated. Quick-Charger is particularly effective and handy when you are not sure whether the battery is fully charged and during contests. Read instructions CAREFULLY and use the charger CORRECTLY.



pop Buggy

Scale 1:8





This smartly designed dune buggy is for .15 or .20 gas engines and 2-Channel radio control equipment. It features an easy-to-start built-in pull-cord starter; a big heat sink duraluminum chassis; special steel suspension system; body made of ABS plastic; and fast and easy changing of gears with a 6-way ratio.

It has been designed and track tested for easy R/C remote operation, on the roughest of surfaces . . . with tight cornering and a minimum of slippage at high speed. It is a superior racing car from every angle.

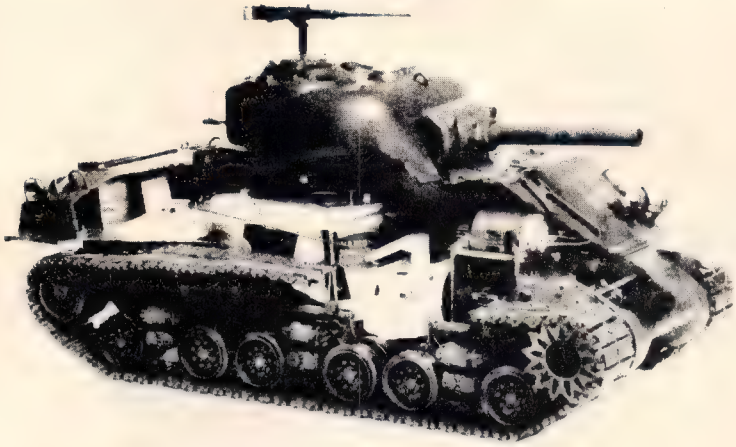
TECHNICAL DATA:			
Wheel Base:	11. 8"	Gear Ratio	70:10 70:14 72:12 72:16
Front Wheel Tread	8. 0"		
Rear Wheel Tread	8. 6"		
Body Length	19. 1"		
Body Width	11. 0"	Centrifugal Clutch	
Body Height	6. 1"	Weight	5.1 lbs

KIT CONTENTS:	
Accessoires	Die Cast Wheels
Oversized Tires	Pull Starter
Large Aluminium Heat Sink	Suspension Joints
Double-Face Bond Tape	Dust Cover
Bumper	Decal
Fuel Tank	ABS Vacuum-Formed Plastic Body

NOTE: Engine and Radio Control unit are not included.

PEL92103	PEERLESS 2103 POP BUGGY	140.00	111.95
PEL92128	PEERLESS 2128 ELECTRIC PORSCHE	115.00	91.95
PEL92204	PEERLESS 2204 QUICK CHARGER	27.95	23.75

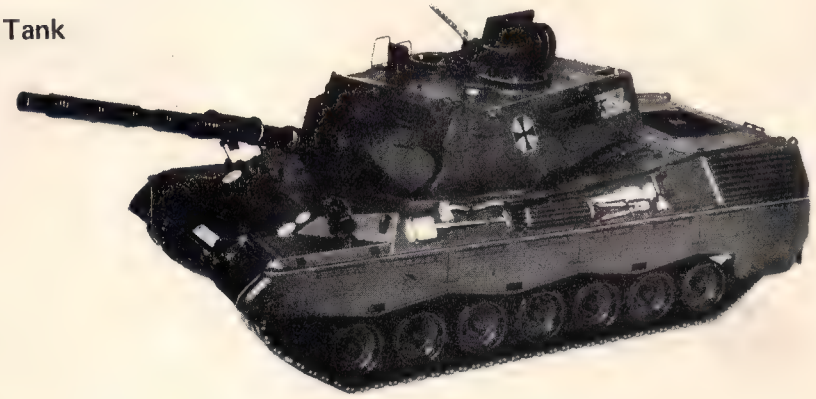
MRC



SHERMAN M4 1/16 SCALE RADIO CONTROL TANK

This 1/16 scale R/C Sherman M4 Tank is a sophisticated piece of engineering that will provide a real challenge for R/C experts as well as novices. It's a change of pace that can add hours of pleasure to your R/C hobby—as you can operate this tank indoors as well as outside. Kit includes hundreds of die cast and stamped metal parts as well as precision molded nylon and ABS plastic parts. Building is made simple due to a complete descriptive 8 page manual containing about 50 photos, exploded views, and drawings. An additional 18 page manual explains the principles of R/C, real and model tank operation, and troubleshooting. Complex subassemblies are already assembled. Requires a 2 channel radio with 2 servos and 6 size "D" batteries. Length 14", weight 8 pounds. Excellent quality.

(RT1602) West German Leopard A4 Tank



*This kit contains the same deluxe features as the Sherman tank and has the same radio and battery requirements.

- Factory assembled gear and clutch system
- Takes 40 degree inclines with ease
- Massive 1/16 scale of a huge prototype gives true tank quality to finished piece
- Scale detailing includes aerial that tucks into housing of cannon
- Metal treads, actual operating suspension system
- Hundreds of precision die cast and stamped metal parts for assembly satisfaction
- Movable latches, swiveling periscope, rear view mirrors, authentic decals
- Operates forward, reverse, left or right
- Dual clutch directs power to left or right tread, lets it turn on a dime. (Batteries and radio not included.)

The Leopard is a real brute of a tank. Not only is it endowed with speed, power and prowess but with the kind of detailing that you're used to seeing on static models.

MRC91601	MRC RT1601 SHERMAN RC TANK	134.98	109.95
MRC91602	MRC RT1602 LEOPARD RC TANK	174.98	139.95

MRC

These are the R/C car kits that separate the men from the boys, R/C hobby kits from the toys.



THE SPEED RACER–
(RA1003) 1/10 Scale
Tyrrell Ford F1 Six Wheeler

NEW



NEW

THE FAST PACED SPORTS CAR–
(RA1202) 1/12 Scale
Martini Porsche 935

NEW



THE ALL TERRAIN VEHICLE
(RA1204) 1/12 Scale
FMC XR311 Combat Vehicle

- ☐ Adjustable gear ratio selection: 4 each on Tyrrell and Porsche; 3 on the FMC Vehicle
- ☐ MRC-Tamiya scale detailing
- ☐ Two forward speeds, two reverse speeds
- ☐ Rear operating differential
- ☐ A kit that offers the hobbyist the satisfaction of assembling precisely engineered models–will appeal to R/C buffs
- ☐ Big output electric motor for indoor or outdoor quiet running. 4 times the power of the toys
- ☐ Nearly ten times the range of toy R/C cars
- ☐ FMC has independent wishbone suspension on all four wheels for handling rough terrain. Proto-typical suspension systems on the Tyrrell and Porsche
- ☐ Three times the speed of toy R/C cars
- ☐ One for every taste–racing it's the Tyrell, running on rough terrain it's the FMC XR311, rally or obstacle, it's the Porsche.
- ☐ So well scaled and realistically detailed that they make excellent static display models when not in use–but then again you'd expect that from MRC-Tamiya

TAMIYA

MODEL RECTIFIER CORPORATION
2500 WOODBRIDGE AVE. EDISON, N.J. 08817

MRC91003	MRC RA1003 TYRRELL 6 WHEELER	67.98	54.95
MRC91202	MRC RA1202 MARTINI PORSCHE 935	67.98	54.95
MRC91204	MRC RA1204 FMC COMBAT VEHICLE	74.98	60.75

MRC



SPECIFICATIONS:
Length: Over 14 inches
Width: Over 7 inches
Gears: Four

Speeds:
Two Forward
One Reverse

THE R/C CAR THAT'S NEITHER TOYISH NOR TEMPERMENTAL...JUST SOLID FUN

MRC-TAMIYA'S ELECTRIC PORSCHE TURBO KIT **PERFORMANCE NOT PROMISES** Move into high gear with this MRC-Tamiya solid, radio control special. It promises performance, it promises fun, it promises reliability . . . and it delivers. Not one of those go-one-way slowly toys, nor a flash-on-the-track you keep adjusting every spin. This one's got spunk, spirit and you can depend on it because it's from MRC-Tamiya. It's the new dimension in R/C car enjoyment with big performance features, powerful electric motor and stand up engineering that will last.

ENGINEERING EXCELLENCE . . . Set the gear ratio you want (there are four ranging from 4.6/1 to 19.4/1). Run it indoors, outdoors, in the driveway, den, street or yard. This Porsche is complete with two forward and one reverse speeds. It includes realistic rear suspension as well as semi-pneumatic-type rubber tires that take to rough and smooth surfaces like a cat. And its proportional steering offers command control.

Depending on your preference, you can power it with rechargeable nickel cadmium batteries, or with four dry cells. And for strength and durability you can't beat the strong ABS plastic body or the rugged Delrin gears. The little things have been considered, too, like lightweight, adjustable frame to accommodate different body designs; shock absorbing front end; differential gear for road hugging cornering. And for your convenience, the kit includes double face tape for mounting R/C gear, extra screws and washers for emergency and even extra plastic for reinforcing, repairing or customizing your Porsche.

MRC91201 MRC RA1201 PORSCHE 934 TURBO 64.98 52.65

LATRAX



LaTrax race cars put you in full control.



Radio Included

LaTrax radio-controlled cars steer, corner, accelerate and back up like real. Four cars at a time can be controlled from as far away as ⅛th mile, performing like gas-powered cars costing two or three times as much.

Durable, quiet, clean LaTrax cars like the Alpha RCX and the 1978 Mustang Cobra can be raced indoors. Sophisticated electronics and engineering feature digitally proportional steering and road-hugging suspension.

This radio-controlled 2-channel system allows total remote control with full digital proportional steering right and left. Has forward and reverse operation and will stand perfectly still until given an electronic command to move.

System operates on 4 "C" cells and one 9-volt battery (Batteries not included).

*A rechargable ni-cad receiver battery (with charger) conversion unit is available as an option

LAT90011	LATRAX ALPHA RCX CAR W/RADIO	63.00	52.95
LAT90012	LATRAX MUSTANG COBRA W/RADIO	68.50	57.50
LAT90306	LATRAX NI-CAD BATT. & CHARGER	19.95	16.95

New radio-controlled race car...



Car comes with radio, ni-cad receiver battery and charger.

a winner from the word "Go."

Now you can own a 1/12-scale radio-controlled race car that is a winner right out of the box. This car has many race-winning advantages that give it the edge over the competition:

- **A powerful 500 mw transmitter to put you in complete control.**
- **A proven D.C. electric motor to avoid messy fuels and difficult starting procedures.**
- **A road-hugging independent front suspension and positraction rear end to put all of the motor's power on the ground where it belongs.**
- **4- to 6-battery switch for indoor or outdoor racing.**
- **Nicad battery and charger for hours and hours of trouble-free racing.**
- **A self-centering steering wheel on the transmitter to assure that you go down the straightaways the way you should — straight.**
- **A tough aluminum chassis and Lexan body to make the car practically indestructible.**
- **True 30 mph top speed.**
- **Wide racing tires.**

Each car is hand-assembled and tested for race-winning performance.

If you can't win with this car, it's the driver's fault.

* 30 - day warranty on all Latrax systems

LAT90040	LATRAX CORVETTE W/NIC. & RADIO	133.50	109.95

Helicopters

The helicopter is still a relatively new development in R/C, even though they have been around for about seven years, now. Because of their inherent complexity, development of the various designs seems to come in jumps, as the bugs in each design are worked out. The major improvements in helicopter flying have been mainly concentrated in making them into reliable, stable flying machines. This has been achieved, along with a dramatic increase in pilot skill and capabilities of the choppers, themselves.

We carry two lines of helicopters, Kavan, and American R/C Helicopters. The Kavan Bell Jet Ranger is imported from West Germany, and is a fine scale helo. The American R/C Helicopters are made in California, and are a good line of rugged helicopters, good for training or top-level competition.

Due to the nature of a helicopter, it does not fly anything like an airplane. Its ability to hover in one place makes the novice learn a wholly different set of flight reflexes than the airplane driver. It can have up to five flight controls. The cyclic pitch control of the helicopter controls pitch and roll of the machine, the collective pitch control changes the pitch of all the main rotor blades simultaneously, the tail rotor control changes the pitch of the tail rotor blades, and last, the throttle controls the speed of the engine. With all of these controls, and the fact that they are highly interactive, the novice may feel that he has a considerable task before him. He doesn't. It is not hard to fly a chopper, it just takes practice.

One thing that is very important to the helo flyer is the fact that he must have absolute trust in his engine. It must be broken in carefully, and must run reliably before one can even entertain thoughts about putting it into a helicopter. The main reason for this is because helicopter usage is very hard on an engine. It's forced to run at its peak setting for long periods of time, large demands are put upon it, the rotor system, and it is made to run in a hotter environment than it would find in more normal service. A well run-in engine will be easier to manage, and you will know its handling characteristics well enough to tell how it is running at any given time.

We do carry a training aid for helicopters, and that is the GMC Helicopter training table. It can help you learn the basics of how one ought to move the control sticks to achieve helicopter flight. As shown in the picture, it is a ball on a tilting table. Since a helicopter in hover near the ground reacts very similarly to the ball on the table, this little gadget can help you out. The table trainer is useless for helping you to fly an airplane.

Bell JetRanger

AN EXCITING DIMENSION IN R/C AIRCRAFT
WORLD'S ONLY FULLY AEROBATIC MODEL HELICOPTER „THE KING OF HELICOPTERS!"

UNDISPUTED WORLD CHAMPION. WINNER OF MORE CONTESTS THAN ALL OTHER HELICOPTERS COMBINED. THE WINNERS' CHOICE!

This precision flying model helicopter opens new doors to the R/C flyer, who knows the difference superior engineering can make. It will test your skill and add variety to your hobby and above all, give you untold pleasure and satisfaction; not to mention making you the envy of your flying field companions.
In the age of R/C helicopters, only the Kavan Bell Jet Ranger has utilized its outstanding engineering principles to perform feats of controlled flying up until now thought impossible. While other helicopters use fixed rotor pitch to lift off, the Kavan Bell Jet Ranger with throttle wide open, clutch engaged, use true-to-prototype pitch to obtain lift response.



SPECIFICATIONS

COLECTIVE PITCH — SCALE 1:6.4
MAIN ROTOR DIAMETER 63" — ENGINE - 60
FUSELAGE LENGTH 51"
CONTROLS 4 CHAN. PROPO.
FLIGHT WEIGHT 10 - 11 LBS
PAYLOAD 50 %

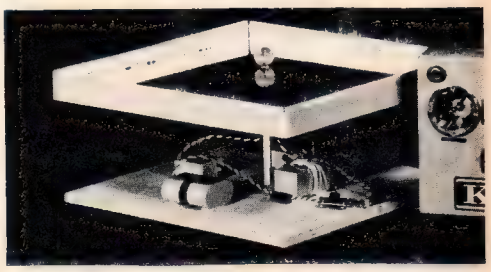
KAVAN

KAV77101	KAVAN BELL JET RANGER 'COPTER	400.00	349.95
KAV78001	KAVAN GYROSCOPE	84.00	67.20
KAV78002	KAVAN POSITION BLINKING LIGHTS	21.00	17.85
KAV78003	KAVAN ELECTRONIC FUEL CONTROL	21.00	17.85
KAV78201	KAVAN RANGER-MAIN ROTOR BLADES	17.50	14.85
KAV78204	KAVAN RANGER-TAIL ROTOR BLADES	3.50	3.30

R/C TABLE TRAINER

The R/C Table Trainer has been featured in Modeler Magazine. This handy gadget will sharpen your flying skills for planes or helicopters and can be used in the den, living room, or shop. For the beginner, learn how to handle reversal of directional controls that occur when an R/C aircraft is flying toward you, master moving, accelerating and stopping the steel ball on this Table Trainer and smooth control of your R/C aircraft will be considerably improved.
Besides the practice, you are cycling your batteries, testing your transmitter and receiver, and it's great fun!

GMC



GMC99001	GMC RC TABLE TRAINER	11.95	10.75

AMERICAN R/C HELICOPTERS

REV-OLUTION



The Rev-olution is the perfect trainer helicopter for the beginner and it is an amazing machine in the hands of an expert. It's rugged design and construction coupled with ready parts availability from the manufacturer in California are all in the beginner's favor.

Specifications: Requires 4 channels and any good .40 size engine. Rotor span is 41", weight is 5¾ lbs. All components are American manufactured and feature a main rotor shaft of titanium, all shielded ball bearings, failsafe clutch, one piece canopy, and complete instructions. 6-8 hour assembly time.

Availability: In 3 versions — (1) Basic Kit without engine and standard rotor, (2) Basic Kit with an H.B. .40 engine, and (3) Basic Kit without engine but with collective pitch. Muffler is extra cost option on all versions.



REV-OLUTION II

The Rev-olution II is a .60 size version of the above Revolution. More weight, more power, more stability.

Specifications: Requires 4 channels and any good .60 size engine. Rotor span is 48", weight is 9 lbs., and length is 45". All American made featuring titanium rotor shaft, all shielded ball bearings, heavy duty failsafe clutch, tank, instructions, and 6-8 hour assembly.

Availability: In 3 versions — (1) Basic Kit with standard rotor and without engine, (2) Basic Kit with standard rotor and with an H.B. .61 engine, and (3) Basic Kit without engine but with collective pitch.

NEW!

TRAINING SYSTEM

WITH SHOCK ABSORBING LANDING GEAR

FOR AMERICAN
REV-OLUTION, REV-OLUTION II,
HUGHES "500", & JET-RANGER

LIGHTWEIGHT, RUGGED
ALL METAL CONSTRUCTION



COMPLETE KIT

Assembles in Minutes

(EASILY ADAPTABLE TO OTHER 'COPTERS)

For Your REV-OLUTION

- COMPLETE KIT · Including Rotor Blades of New Wood Material.
- NOTHING ELSE NEEDED to convert your Rev-olution to Collective Pitch!!!



* Collective Pitch Kit.

NOW AVAILABLE

Collective Pitch Kit*

★ NO 5TH SERVO REQUIRED
★ EASY TO ADJUST
★ PRECISION FLYING

AMERICAN R/C HELICOPTERS



SPECIFICATIONS AND FEATURES: RADIO 4 Channel; ENGINE SIZE 61 Main Rotor Span 48"; Flying Weight 9.75 lbs.; Overall Length 48.5" Titanium Main Rotor Shaft All Shielded Ball Bearings; Heavy Duty Fail Safe Clutch; Fuel Tank Included; Six to Eight Hr. Assembly (Excluding Painting of Fuselage)

FINALLY . . .

A Jet-Ranger Helicopter Kit You Can Afford to Buy and Afford to Fly! (Spare Parts Priced Well Below the Other Jet-Ranger Kit)

RUGGED CONSTRUCTION

TITANIUM Main Rotor Shaft, Fuselage of EPOXY GLASS, Windows and Tail Cone of Rugged, Durable LEXAN.

EASY TO ASSEMBLE

Requires Only 6-8 Hours to Assemble (Excluding Painting of Fuselage)

EASY TO FLY

No Tedious Adjustments Required - High Speed Rotor System For Outstanding Inherent Stability.



New "Superr-Quiet" Chopper Muffler For any .40 size engine

The .60 size Jet Ranger is available in 3 versions: (1) Basic kit with standard fixed pitch rotor and without engine, (2) Basic kit with standard fixed pitch rotor and with an H.B. .61 engine that comes with a special Jet Ranger muffler, and (3) Basic kit without engine but with collective pitch rotor system.

NOTE: American R/C Helicopters are made in America to the highest standards. Domestic manufacture insures you that if a problem should occur you can contact the manufacturer direct for an instant solution, and parts availability is excellent. Tower Hobbies recommends all of these fine helicopters to you with no reservations.

ARC16000	SUPERR-QUIET MUFFLER-K&B .40	17.95	17.00	127
ARC16001	SUPERR-QUIET MUFFLER-HB .40	17.95	17.00	127
ARC77000	AMERICAN REV-OLUTION W/O ENGIN	239.00	227.00	126
ARC77010	AMERICAN REV-OLUTION W/ HB 40	294.00	279.00	126
ARC77040	REVOLUTION W/COLLECTIVE PITCH	289.95	275.45	126
ARC77200	AMERICAN REVOLUTION II W/O ENG	299.95	284.95	126
ARC77210	AMERICAN REVOLUTION II W/HB 61	379.95	360.95	126
ARC77260	REVOLUTION II W/COLLECT PITCH	349.95	332.45	126
ARC77300	AMERICAN RC JET RANGER W/O ENG	349.00	331.55	127
ARC77310	AMERICAN RC JET RANGER W/HB 61	419.00	398.00	127
ARC77360	JET RANGER W/COLLECTIVE PITCH	399.00	379.00	127
ARC78100	REVOLUTION FLOAT KIT	22.95	21.80	127
ARC78200	REVOLUTION MAIN ROTOR BLADES	7.75	7.35	127
ARC78300	COLLECTIVE PITCH - 40 SIZE	89.95	85.45	126
ARC78360	COLLECTIVE PITCH - 60 SIZE	179.95	169.95	126
ARC78400	AMERICAN COPTER TRAINING GEAR	34.95	33.20	126

Radios

The radio is the heart of the R/C system . . . the sport *is* called *radio control.* Without it, we would have no means to fly our planes as we would like them to be flown. We would still be flying free-flight. With modern R/C equipment, we can do all of the same maneuvers that a real plane can do. In fact, we can do some that no real plane can do! Have you ever seen a real plane turn around in nearly a 90-degree bank without losing any altitude?

In using radio equipment, the word, "channels" comes up very often. This word stems from early days of R/C equipment development. Then, it meant that different channels were used to carry the control information, and that the receiver could "hear" only one channel at a time. This meant that you could not have two simultaneous control inputs, but, instead, you would have to rapidly alternate control inputs. Nowadays, the word "channel" refers to the number of control functions of the system. Any or all of them may be used at the same time, giving us complete control of the aircraft . . . at least as complete a control as our skill allows!

There are four basic components to the R/C system: the transmitter, the receiver, the on-board battery, and the servo (there may be several of these).

The transmitter is the device that sends the signal to the plane. It has upon its face several controls. There are up to four major controls, and a variety of minor controls. On a four- or more channel system there are four major controls: each of the control sticks that extend out of the face for a few inches controls two controls. The controls are: elevator, rudder, ailerons, and throttle. Each stick has a small control, called the "trim" near it. The trims allow small adjustments in the position of the center of control movement. This allows you to adjust the radio when you only need a small movement of the stick to hold the aircraft in a neutral flight condition.

The other controls that may be found on a radio are extras. There are usually up to three of these extra controls. They allow you to control more functions than the four major flight controls, such as retractable landing gear, landing flaps, and anything else you may need.

When you move a control upon the transmitter, it encodes this movement into a series of pulses and sends them out into the airwaves via a radio signal. This frequency is determined by the manufacturer of the system, and must be one of those allowed for R/C purposes by the FCC (Federal Communications Commission).

The receiver collects the signal with the antenna, and decodes the signal into the various control pulses and sends the proper pulses to the proper servo.

The servo is a little device that contains some circuitry and a small electric motor. The circuitry uses the pulsed signal sent to it by the receiver to tell the electric motor which way to turn, and how far to turn. The motor turns a series of gears which reduce the speed of the motor, and increase the torque output. On the top and outside of the servo, there is a little wheel or lever with some holes in it. This is the servo output arm. It is connected to the control pushrod and transfers the power of the servo to a pushrod, which moves the desired control on the aircraft.

Since there must be some sort of power used by the electric motors and the circuitry of the servos and receiver, an on-board battery is used. It works through a switch so that you can turn off the power when it is not needed. Also linked through the switch is a plug which allows a charger to be connected to the battery. In most R/C systems, the battery is of the nickel-cadmium type. This battery is small and quite powerful, and is capable of being recharged many times. An interesting feature of these batteries is the fact that if they are used a lot, they will have a longer useful life than if they are used little.

These batteries (also called Ni-cad batteries, or "Nicads") are not good for holding a charge for a long time, so they must be charged the night before they are used, even if only a few days have elapsed since they were last charged. You should refer to the manufacturer's instructions for the proper procedures for charging.

You will also usually find nicad batteries in your transmitter. Though of a higher voltage than those used in the airborne system, their properties are the same, and they usually use the same charger provided for charging the airborne batteries, though a different connector is provided so that you won't mix-up the receiver and transmitter batteries during charging.

Frequency:

There are several frequencies used in R/C. Except as noted, they can be used for any R/C use. *-denotes for aircraft use only.

26.995 (brown)	53.100 (black & brown)	72.080* (white & brown)
27.045 (red)	53.200 (black & red)	72.160 (white & blue)
27.095 (orange)	53.300 (black & orange)	72.240* (white & red)
27.145 (Yellow)	53.400 (black & yellow)	72.320 (white & violet)
27.195 (green)	53.500 (black & green)	72.400* (white & orange)
27.255 (Blue)		72.960 (white & yellow)
		75.640* (white & green

The colors noted are the colors of the streamers mounted at the end of the transmitter antenna. They help you at the field to identify any frequency by simply glancing at the flags in use.

Frequencies in the 27 mHz range are in the same band as the familiar CB voice channels. In fact, CB frequencies are between the R/C frequencies, and one frequency, 27.255 mHz, is actually *shared* with a CB frequency (channel 23). Normally the separation between frequencies is enough to prevent interference between frequencies, but the widespread growth of CB, with the usual lack of care for transmitter tuning by the average CB'er has resulted in a tremendous amount of radio interference that has rendered the 27 mHz band virtually useless to the R/C'er. That's why you don't see many 27 mHz systems available any more.

Frequencies in six-meter (53 mHz) range are clear and uncrowded, but you must have a special license to use these frequencies (see "licensing"). Because of these

licensing requirements, few people are using these frequencies, and radios on this band are available by special order only.

The 72 mHz band is nowadays the most popular R/C band. This is because there is little interference by other services, and the licensing requirements are very simple. There are seven frequencies, so that there is little crowding except for the most densely populated areas. One note, however, some of the 72 mHz frequencies are used by public-service agencies for communications. This use is limited to various areas, and is not continuous . . . check with your nearest FCC field office to check which frequencies may be in use.

The only limit to usage in the 72 mHz band is the restriction placed upon four of those frequencies. These four may not be used for any radio-control use, except for the flying of model aircraft. If you want to run boats, or cars, or anything else that is not an aircraft, you must use one of the other R/C frequencies (see Frequency chart).

Licensing

Because of the frequencies used and the power of the transmitters, the FCC requires that the modelers hold an appropriate license *before* they operate their R/C Equipment. The license needed depends upon the frequency band used.

In the 27 or 72 mHz band, you must hold a Class C Citizen's Radio Station License. This is not the same as that license used by people who have citizens'-band radios in their house or car. That is a class D license. The class C license is limited to non-voice transmitters for the radio-control of models, only. In order to get this license, you must fill out an FCC form #505 and send it in. There is no charge for this service, but you must have the license in your possession before you can operate your R/C gear legally.

In the 53 mHz band, you must be the holder of an Amateur Radio License with a technician class or higher rating. If you want to obtain this license, you must pass an examination in electronic theory, and pass a practical examination in morse code. You can contact the FCC or a local Amateur radio club, or a store that sells amateur equipment for details in getting this license. It is difficult to get, but it opens a lot of possibilities for you, since very few modelers use these frequencies.

Installing your radio

When you have received your radio and are ready to install it, make sure that you read the manufacturer's instructions carefully. This way you will know how to hook it up properly, and will be able to check out the condition of the radio.

If the manufacturer provides you with a procedure that will allow you to check-out the radio when you have just received it, use it as soon as you have received the system. Each radio manufacturer provides his radio with a warrantee against defective parts or poor workmanship. You should read their warrantee carefully so that you will understand exactly what he will do when you have difficulty with your radio.

Once you have decided that the radio is checked-out and it is ready to install, take a look at the servos when they are all hooked-up. As you move the sticks, observe the direction of rotation of each servo. By observing this movement, you will be able to decide how to route your pushrod installation so that you will hook up the controls to move in the proper direction.

The direction that a servo rotates is totally irrelevant, except in certain uses. These are strip ailerons in airplanes, and the steering servo in some cars. In any other installation, if you find that you just have to have a servo that moves in a particular direction, then you have made an error in planning your control installation. (For strip ailerons, the servo should move in a counter-clockwise direction when you deflect the aileron stick to the right.)

When you go to mount your radio in your plane use the mounting trays provided with the radio. If your radio did not come with trays, your servo can still be mounted in the plane. Make a pair of servo rails out of hardwood or plywood, about ¼" x 3/8" and space them so that the rails are centered under the mounting holes of the tray, or under the mounting flange of the servos, if you are not using trays. Mark the location of the holes, and drill them out for the screws you will be using. When you put the servos or the tray into the rails and insert and tighten the screws, do not tighten them so that the grommet that is in the servo or tray is deformed. This will rob your servos of a vital anti-vibration protection provided by the grommets.

Wrap your receiver and airborne battery in a layer of foam rubber. Do not wrap the foam so tightly that it is stretched . . . it should go around quite easily, and not be forced. You will wind up with a bundle that is quite a bit larger than the original size of either component, but you will now have something that will resist vibration (and any impact you might impose upon it).

Finally enclose your receiver and battery in a plastic bag so that they will resist any fuel or oil that may find its way into your plane. This step is especially important if your battery will be mounted under the fuel tank. Now insert your radio into the plane. The receiver and battery should fit into place without causing the foam to be tightly crushed against the sides of the plane. The foam should be free to stay completely expanded. This will inhibit transmission of vibration to the radio components.

You can use foam from ¼" in thickness, up to whatever you like. Just so long as you can get it into the plane without crushing it, you'll be all right. Sonic-Tronics makes an excellent protection foam, marketed under their name of "Protect-A-Pak". I've used this stuff many times, and it works just as it should . . . provided you use it properly.

TOWER HOBBIES

TOWER HOBBIES SIX & THREE CHANNELS

Tower Hobbies digital proportional radio control systems are absolutely the finest value radios on the market today. Take a close comparitive look at the Tower systems against *any* other brand and you will quickly see that you get unquestionably the most radio for your money with Tower!

QUALITY : Tower radios are made for us by Kraft Systems in California. They are manufactured to our exacting specifications which include the latest technology of design, the finest components, precision assembly, and outstanding quality control. Kraft is the World's finest R/C systems manufacturer and Tower Hobbies is the most reputable R/C distributor in the industry - the combination of the two guarantees you the finest possible product and service all at the lowest possible price.

WARRANTY : Tower radios are warrantied for 180 days from the date of first purchase. Five convenient warranty service centers are located accross the Country for fast, dependable, and precise service.

COMPATIBILITY : The Tower 6 and Tower 3 components are fully compatible with the previous Tower 5 model as well as the entire line of Kraft Systems radios (except for the "A" series). This gives you the greatest accessory and feature availability in the industry — interchange flight packs, servos, chargers, trays, output arms, or anything from the Kraft lineup of outstanding products.

COMPONENTS : The Tower 3 channel comes standard with two KPS-14 servos and a lightweight 450 MAH ni-cad receiver battery pack, giving an airborne pack weight of only 7.9 ounces. The Tower 6 channel comes with your choice of four KPS-14 or KPS-15 servos and a powerful 550 MAH receiver battery pack, giving an airborne pack weight of only 11.9 ounces with 14's and 13.5 ounces with 15's. Both systems come with lightweight slimline receivers that make for very convenient installations. Both switch harnesses have external recepticles for charging convenience.

FEATURES : Both Tower systems feature a dual function meter that allows you to check RF and absolute battery voltage. This allows you to monitor your flying time in addition to being able to check for possible cell malfunction. This deluxe feature is usually only found on systems in the $500.00 price range.

POPULARITY : Tower radios enjoy a high degree of popularity at flying fields all across the country. When you show up at the field with a Tower radio your flying buddies will know that you are a no-nonsense flyer that demands top quality equipment but at down to earth prices. Your choice of a Tower radio says a lot about your astute ability to recognize true value — it shows you're a smart shopper!

APPEARANCE : Tower Hobbies radios are attractive. There is just something very elegant about that rich ivory color accented with black trim pieces. But that's in keeping with the total quality feel of Tower radios — that first class feeling. We just don't think that a radio should look weird or strange — because we feel that the radio you fly is a reflection of your own personality. With Tower Hobbies radio control systems you go first class in quality, performance, and appearance.

PRICE : Tower Hobbies radios give you absolutely the maximum amount of radio for the least amount of money — and that's value! There is nothing cheap about a Tower radio. The design is the latest, the manufacturer is the finest, the quality is peerless, and the service is second to none. So how then can the price be the lowest in the industry? Simple. Tower's tremendous buying power allows us to create economies due to volume — and there are no middlemen between us and the manufacturer to artificially jack up the price. You're paying the bottom dollar price for the top of the line product. We can't think of any reasons why you should pay more to get less.

ORDER NOW ! ! Both systems are in stock for immediate delivery on the 72 mHz frequency of your choice. Call Toll Free right now for immediate COD delivery or send your order in the mail along with purchase amount plus $2.00 for postage. If you are not 100% satisfied with your Tower radio after receiving it then simply send it back in original condition within 10 days for a full purchase price refund.

TOWER SIX

The Tower 6 channel transmitter comes in the popular 2 stick closed gimbal configuration. Standard equipment includes a fully proportional fifth channel, toggle switch sixth channel, choice of four KPS14 or KPS-15 servos, slimline high range receiver, ni-cad batteries in both transmitter and receiver, charger, switch harness, servo trays, full servo accessories, and a dual function meter that indicates both RF and absolute battery voltage.

This is a top of the line complete radio system that is perfect for all radio control applications. From ½A to pattern ships, it offers all the performance you could ever ask for.

Six channels, top performance, high quality, and outstanding service after the sale — all at the lowest price in the hobby. Can you think of any reason why this shouldn't be your next radio?

Retail $350.00 Stock #TOW88462

ONLY $199.95

TOWER THREE

The Tower 3 channel transmitter comes in the popular single stick closed gimbal configuration. Standard equipment includes a fully proportional third channel, two KPS-14 servos, slimline high range receiver, ni-cad receiver battery, charger, switch harness, servo accessories, and a dual function meter that indicates both RF and absolute battery voltage. The dry cell transmitter (battery not included) can easily be converted to ni-cad operation by adding ni-cad pack.

This is a top of the line complete radio system that is perfect for small aircraft, gliders, boats, and cars. It's lightweight, yet very rugged.

Same outstanding performance, quality, and service as in our 6 channel and again all at the lowest price in the industry. This is the system that makes sense for the beginner that needs three or fewer channels.

Retail $210.00 Stock #TOW88231

ONLY $119.95

Both systems come complete except that the 3 channel requires a battery (Eveready #276 dry cell or Kraft KB-BD ni-cad). All other items listed at right are replacement or additional parts. Also, all Kraft System accessories are compatible. See P-134 for Kraft trays, servos (not "A" Series), battery packs, output arms, etc. that are compatible with Tower Systems.

TOW88231	TOWER HOBBIES 3 CHANNEL RADIO	210.00	119.95
TOW88462	TOWER HOBBIES 6 CHANNEL RADIO	350.00	199.95
TOW83240	TOWER 450MA RX NICAD BATT-3 CH	17.95	15.25
TOW83530	TOWER HOBBIES 3 CH RECEIVER	59.95	47.95
TOW83560	TOWER HOBBIES 6 CH RECEIVER	69.95	55.95
TOW83630	TOWER HOBBIES 3 CH TRANSMITTER	69.95	55.95
TOW83660	TOWER HOBBIES 6 CH TRANSMITTER	114.95	89.95

TOWER HOBBIES



TOW80142	TOWER SERVO ACCESSORY PKG-14II	1.98	1.75
TOW80152	TOWER SERVO ACCESSORY PKG-15II	1.98	1.75
TOW81140	TOWER KPS-14II SERVO (IVORY)	44.95	34.95
TOW81150	TOWER KPS-15II SERVO (IVORY)	44.95	34.95
TOW82314	TOWER SERVO TRAYS(3) PKG (14)	6.95	5.50
TOW82315	TOWER SERVO TRAYS(3) PKG (15)	6.95	5.50
TOW83000	TOWER 3 & 6 CH SWITCH HARNESS	7.95	6.95
TOW83010	TOWER AILERON EXTENSION WIRE	3.50	3.15
TOW83020	TOWER TX ANTENNA FOR 3 & 6 CH.	3.95	3.55
TOW83120	TOWER DUAL BATT. CHARGER-3 CH.	14.95	12.70
TOW83130	TOWER 6 CH TRANSFORMER-CHARGER	5.95	5.35
TOW83220	TOWER 550MA RX NICAD BATT-6 CH	17.95	15.25
EVE19276	EVEREADY #276 9 V TX BATT-DRY	4.70	4.45
KRA83250	KRAFT BAT PK N5-8D NI-CAD OPT.	29.95	22.95

KRAFT

WHY SHOULD YOU BUY KRAFT?

We push the sale of Kraft radios because we know they are the best. Tower Hobbies receives fewer customer complaints about Kraft radios than any other line. This is because when you purchase a Kraft radio, you are purchasing more than just a transmitter, receiver, servos, and other components. You're purchasing a system that you will place your trust and confidence in to bring your plane back to you in one piece. You are purchasing the industries broadest service network that can repair your system quickly, correctly and fairly. You are purchasing a company behind the scenes that has pride in its product and service. This is why you purchase a Kraft system because you know that it is manufactured right here in the United States to the highest standards known in the industry. Very simply, it is going first class. Kraft is the world's finest R/C systems manufacturer and recognized as such since 1959.

SPORT SERIES SYSTEMS

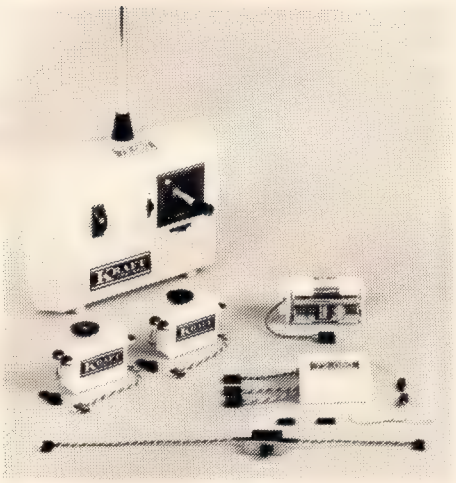
Now the value conscious enthusiast can have the quality, reliability, and performance inherent in all Kraft products at highly competitive prices. The utility of the Sport Series line is further enhanced by the availability of a complete line of specially adapted accessories. The Sport Series is available on all 72 and 27 MHz frequencies.



TWO CHANNEL SYSTEMS
These are ideal for gliders, boats, cars, and simple powered aircraft. Three transmitter control configurations are available to suit any requirement.

Pictured above beginning at the far left is the KP-2AS single stick transmitter, followed by the KP-2A dual stick and the KP-2AW wheel control transmitters.

KRAFT



KP-2AS #KRA88221
This system features the popular single stick configuration with a precision open gimbal stick for improved control feel and precision centering.

The system is designed to use standard pencell type alkaline batteries that can be easily converted at Kraft Service Centers to rechargeable nickel cadmium cells when the owner desires.

The complete system includes a subminiature receiver with plug-in antenna, (a special short length antenna is available, see page 136), two standard servos, switch harness, and receiver and transmitter cases (batteries not included).

KP-2A #KRA88222
These systems are supplied with a dual stick transmitter incorporating two single axis stick assemblies. Other features are the same as with the KP-2AS.

KP-2AW #KRA88223
Primarily for cars and boats, this system features a transmitter with a steering wheel and special throttle control. The throttle control is spring loaded to an adjustable low speed setting determined by a very fine ratchet. This permits accurate setting of the low speed idle or braking point. The rest of the system is the same as the previous two systems described.



4 AND 6 CHANNEL SYSTEMS

KP-4A #KRA88242
KP-6A #KRA88262

We believe these sets offer by far the best value in the radio control field. They are identical except for the difference in the number of channels. The 4-channel can be converted to the 5 or 6 channels when the customer desires. Contest type open gimbal sticks are featured for accuracy and smoothness in control. The miniature receiver incorporates a double tuned RF section with exclusive noise and interference rejection circuitry. For convenience, the receiver antenna plugs in. The rugged and powerful KPS-14IIA or KPS-15IIA servos are standard. Systems include a transmitter, 4 servos, receiver, rechargeable receiver and transmitter battery packs, charger, switch harness and servo tray.

*Note, 1977 and 1978 Sport Series systems feature a longer than normal digital time base for greater simplicity. Therefore, they are not compatible with other Kraft systems or components but a complete line of accessories is available to Sport Series specifications.

All systems and components covered by a full one-year limited warranty!

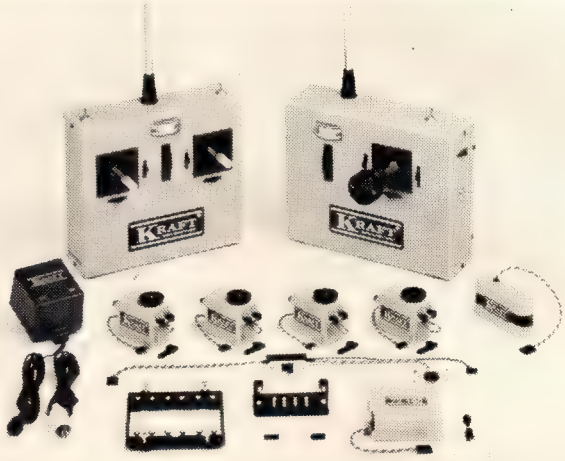
KRA88221	KRAFT KP-2AS RADIO (2 CH, 1 ST)	129.95	90.95
KRA88222	KRAFT KP-2A RADIO (2 CH, 2 ST)	129.95	90.95
KRA88223	KRAFT KP-2AW RADIO (2CH WHEEL)	129.95	90.95
KRA88242	KRAFT KP-4A RADIO (4 CH, 2 ST)	299.95	204.95
KRA88262	KRAFT KP-6A RADIO (6 CH, 2 ST)	329.95	229.95

KRAFT

SERIES SEVENTY-EIGHT

For the serious modeler who demands the very best, the Kraft Series '78 systems are the only choice. They feature performance, painstaking quality and a wide variety of options. All transmitters have plug-in frequency modules which permit changing not only frequencies within the band but from band to band. This is your protection against obsolescence as systems can be easily converted to new frequencies when and if allotted by the FCC.



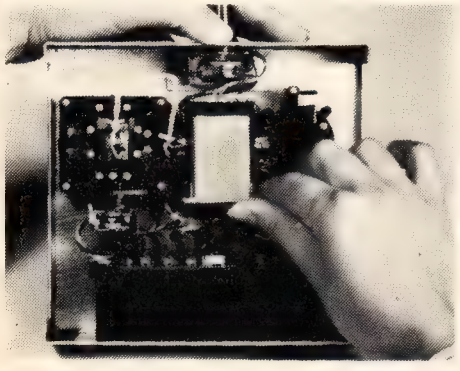


KP-3C #KRA88232
The KP-3C is ideally suited for gliders, boats, three function powered aircraft, and cars. At the transmitter's left hand is a self-neutralizing control stick that may be rotated to provide either vertical or horizontal movement and may be easily converted to positionable control. At the right hand is a two-axis precision open gimbal stick. It can be adapted for either positionable or self-neutralizing operation of the vertical control axis. A meter monitors relative R.F. output.

The plug-in R.F. section is accessible by removing the transmitter back and operation on any of the standard R/C frequencies may be selected. Pictured with this system are the optional KPS-12 miniature servos and KB-4S battery pack. The system includes a transmitter, a miniature three channel receiver matched to the transmitter R.F. module, two servos, rechargeable receiver and transmitter battery packs, charger, switch harness, and servo trays.

KP-5C#KRA88252 **KP-5CS #KRA88251**
The KP-5C and KP-5CS five channel systems establish an entirely new level in quality and performance in the medium price field.

The transmitters feature an internal plug-in frequency module accessible by removing the back. The transmitter meter monitors relative R.F. output. A trainer system is optional and can be easily added at any time. The low cost KPR-5C five channel receiver does not have plug-in modules but is completely interchangeable without the need for matching to the transmitter. Pictured in the system are the optional KPS-1511 servos which combine great power with high speed of operation. Also shown is the optional lightweight 450 MAH KB-4M battery pack. Systems include a transmitter, receiver, rechargeable receiver and transmitter battery packs, charger, switch harness, four servos, and servo trays.



← Three and five channel transmitter plug-in modules are easily accessible by removing the transmitter back.

KPR-5C #KRA83050
This is a low cost crystal filter I.F. receiver that allows complete interchangeability without retuning or matching to a specific transmitter. The RF section is double tuned to minimize interference and includes special noise rejection circuitry. It also features a plug-in antenna.

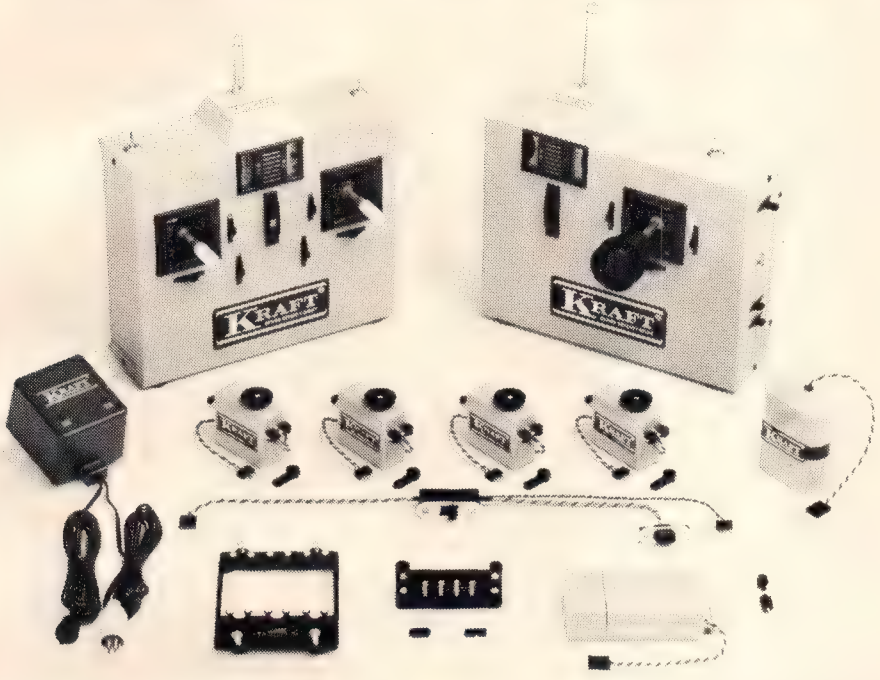


KRA88251	KRAFT KP-5CS RADIO (5 CH,1 ST)	375.43	289.95
KRA88252	KRAFT KP-5C RADIO (5 CH, 2 ST)	375.43	289.95
KRA88271	KRAFT KP-7CS RADIO (7 CH,1 ST)	515.43	389.95
KRA88272	KRAFT KP-7L RADIO (7 CH,2 ST)	515.43	389.95
KRA88371	KRAFT SIGNATURE SERIES-1 STICK	849.95	775.00
KRA88372	KRAFT SIGNATURE SERILS-2 STICK	749.95	685.00

KRA88232	KRAFT KP-3C RADIO (3 CH, 2 ST)	219.95	174.95
KRA83050	KRAFT 5C RECEIVER KPR-5C	49.95	45.95
KRA83071	KRAFT KPR-7C RECEIVER W/MODULE	89.95	79.95
KRA83072	KRAFT KPR-7L RECEIVER-MINI	89.95	79.95
KRA83510	KRAFT TRANSMITTER RF MODULE	24.95	22.45
KRA83520	KRAFT RECEIVER RF MODULE	24.95	22.45

KRAFT

ALL KRAFT RADIO CONTROL SYSTEMS AND COMPONENTS CARRY A FULL ONE-YEAR LIMITED WARRANTY.



KP-7C #KRA88272 **KP-7CS #KRA88271**

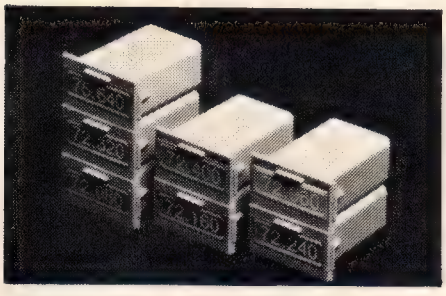
For competition or sport flying, the KP-7C and KP-7CS seven channel systems are loaded with features and extra controls to suit the requirements of the most complex model. The systems feature external plug-in frequency modules in both transmitter and the standard receiver.

Three function dual meters in the transmitter indicate R.F. output, transmitter battery voltage, and via a jumper cable, receiver battery voltage. For greater accuracy and long life, transmitter control pots are expensive precision instrument type. A trainer system is standard. The antenna disconnects and retracts into the transmitter case.

Optional KPS-14II servos and KB-4E battery pack are pictured with this system. Because of its small size and rugged gear train, the KPS-14II is an ideal all around servo. Systems include a transmitter, receiver, rechargeable receiver and transmitter battery packs, charger, switch harness, four servos and servo trays.

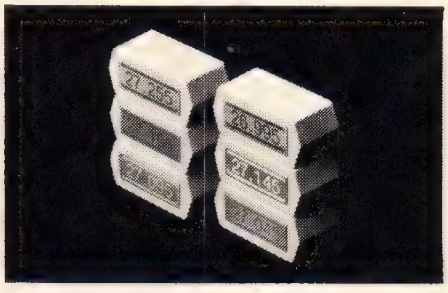
SIGNATURE SERIES

Kraft's custom built Signature Series R/C system is available by special order.



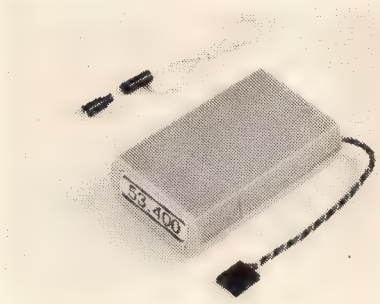
TRANSMITTER R.F. MODULE #KRA83510

All Transmitters for Series '78 Systems have plug-in R.F. modules for easy frequency changing. Replacement modules are available on all standard frequencies (see price listing section).



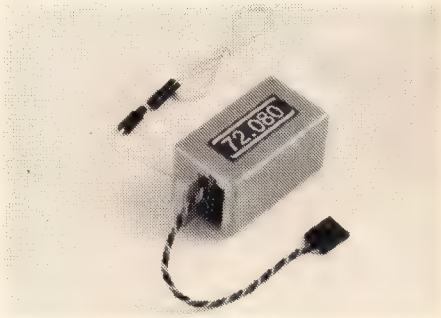
RECEIVER R.F. MODULE #KRA83520

Note: Only the 7-channel KPR-7C receiver features the plug-in R.F. modules. You may purchase as many module sets as desired for greater frequency flexibility.



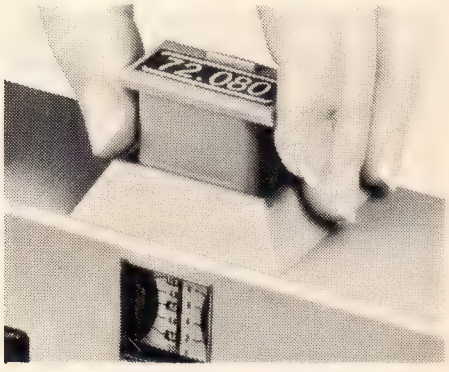
KPR-7C #KRA83071 (with module)

This is the standard 7 channel receiver with a plug-in RF section for instant conversion to any available frequency. It contains two 4-pole ceramic IF filters that allow complete interchangeability, a double tuned RF section that minimizes interference, special noise rejection circuitry, and a plug-in antenna.



KPR-7L (Mini) #KRA83072

This subminiature 7-channel receiver is identical in circuitry to the KPR-7C but the elimination of the plug-in RF module and use of special components results in a very small size and light weight; only 1.3 oz.!



All Series '78 systems are available on any 27 or 72 MHz frequency. (53 MHz by special order only.)

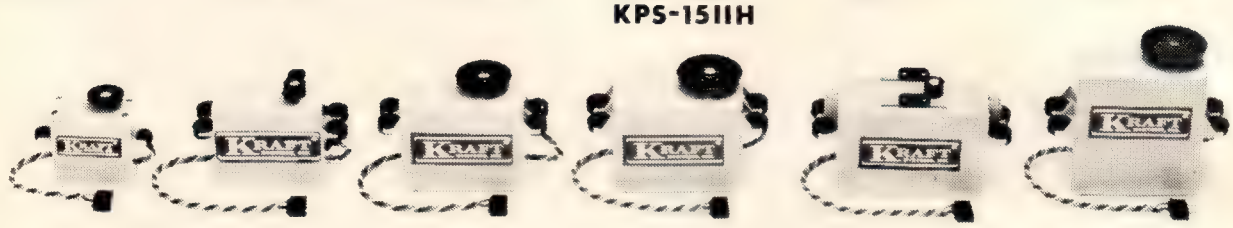
For a free 1978 catalog describing the entire Kraft line, write:

Kraft Systems, Inc. Dept. T
P. O. Box 1268 Vista, California 92083

KRAFT

COMPONENTS AND SYSTEM ACCESSORIES

KPS-18 KPS-12 KPS-14II KPS-15II KPS-15IIH KPS-11 KPS-16



SERVOS

Kraft servos have long set the industry's standard. They provide full throw, instant response, great accuracy, and high power. All have their reference element directly coupled to the output drive shaft to eliminate the mechanical centering error characteristic of reference elements gear driven from the servo output.

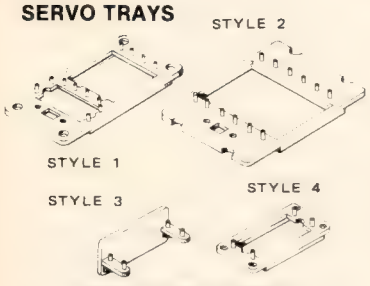
A bridge output type servo amplifier is used which means that the servo can operate even though one battery cell may be dead or shorted. Special servos with 180° rotation are available to provide a locking action to eliminate servo gear loading for applications such as retractable landing gears.

KRA81110 KRAFT KPS-11 Servo combines the versatility of both rotary and dual linear rack outputs with moderate size.
KRA81120 KRAFT KPS-12 is a miniature servo with good power and speed despite its small size. It is recommended for moderate duty applications.

KRA81140 KRAFT KPS-14II is a general purpose miniature servo with ruggedness to withstand even unreasonable abuse.
KRA81150 KRAFT KPS-15II is very popular because of its exceptionally rugged construction.
KRA81158 KRAFT KPS-15IIH utilizes a lower resistance motor for greater speed and power. (Not recommended for multiple servo use unless a larger capacity battery pack is used.)
KRA84160 KRAFT KPS-16 has extra gearing for great power but slower speed. 180° rotation is standard.
KRA81180 KRAFT KPS-18 is the world's smallest lightest digital proportional servo. It features exceptional efficiency and performance comparable to standard Kraft servos. It really must be seen to be believed.

*See order listing for servos available for the Sport Series line (A code sets) and additional servos available with 180° rotation.

SERVO TRAYS



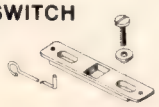
SERVO TRAY PART NUMBERS

SERVO	STYLE 1	STYLE 2	STYLE 3	STYLE 4
KPS-11 KPS-11A	KRA82041	KRA82042	KRA82040	
KPS-12	KRA82045	KRA82046	KRA82044	
KPS-14II KPS-14H	KRA82089	KRA82088	KRA82090	KRA82101
KPS-15 KPS-15II KPS-15H KPS-15HII KPS-16	KRA82093	KRA82092	KRA82094	KRA82102

SERVO ACCESSORIES

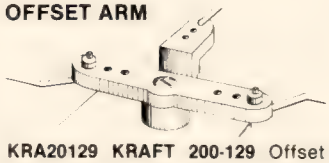
All necessary mounting hardward, grommets, and output arms for the servo.
KRA80125 KRAFT 200-125 Accessories for the KPS-14II servo.
KRA80126 KRAFT 200-126 Accessories for the KPS-15II servo.

SERVO TRAY SWITCH ACTUATOR



KRA82120 KRAFT 200-120 This switch actuator eliminates cutting slots or drilling holes to mount switch. Wire link operates slide.

OFFSET ARM



KRA20129 KRAFT 200-129 Offset Arm allows up to 180° operation. Useful in mechanical landing gear hook-up applications. Recommended for KPS-15II and KPS-15HII servos. Can also be used with KPS-14II servo.

ADJUSTABLE OUTPUT ARM



KRA20141 KRAFT 200-141 Output arm length adjusts for precise control travel. Maximum adjustment range of .55". For KPS-14II and KPS-15II servos.

LONG ARM



KRA80162 KRAFT 200-162 This extra long output arm (1.24" in length) is for use with KPS-14II and KPS-15II servos.

LARGE WHEEL



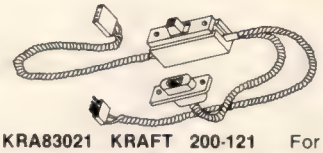
KRA80168 KRAFT 200-168 This extra large output wheel (1.9" in diameter) is for use with KPS-14II and KPS-15II servos.

REMOVEABLE RECEIVER ANTENNAS



KRA83183 KRAFT 200-183 Standard 32" antenna.
KRA83184 KRAFT 200-184 This 18" antenna is intended for small aircraft and gliders. Base loading of this antenna results in little loss of range.
KRA83185 KRAFT 200-185 12" whip antenna with mounting hardware for waterproof installation in a boat deck or car body.

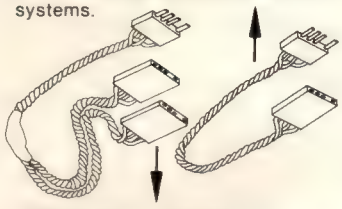
SWITCH HARNESSES



KRA83021 KRAFT 200-121 For Series Seventy-Five through Series Seventy-Eight. Includes charge receptacle.
KRA83015 KRAFT 200-154 Miniature switch harness for use with Series Seventy-Five 7 channel receiver; also with all 1976 Bicentennial through Series Seventy-Eight receivers. Includes charging receptacle.
KRA83014 KRAFT 200-149 For Sport Series KP-4A and KP-6A systems. Includes charging receptacle.
KRA83029 KRAFT 200-029 For Series Seventy through Series Seventy-Four and all Sport 5 Series receivers. Includes charging receptacle.

AILERON EXTENSIONS

Six inch aileron extension cables connect servo and receiver at extended distances.
KRA83035 KRAFT 200-150 For use with Sport Series "A" line systems.
KRA83036 KRAFT 200-036 for use with Series Seventy-Eight and prior systems.



SERVO "Y" CONNECTOR

KRA83037 KRAFT 200-037 "Y" connector permits plugging two servos into the same receiver channel for simultaneous operation.

MASTER TRAINER SWITCH



KRA83004 KRAFT 350-004 This switch is for use on KPT-5C transmitters only, for conversion to master/trainer capability.

MASTER TRAINER CORD

KRA83030 KRAFT 200-030 This cord is necessary for connection between any two Kraft master/trainer equipped transmitters.

KRAFT



BATTERY PACKS

All Kraft ni-cad battery packs are of the fast charge type and specifically designed to withstand high vibration and shock.

KRA83230 KRAFT KB-4F 1000 MAH battery pack is for special applications such as long duration gliders and complex stunt and scale aircraft.

KRA83220 KRAFT KB-4E 550 MAH battery pack has ample capacity for all general applications.

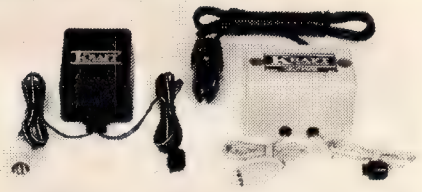
KRA83235 KRAFT KB-4S 450 MAH battery pack is intended for use where light weight and small size are important.

KRA83240 KRAFT KB-4M 450 MAH battery pack differs from the KB-4S in configuration only. These packs are not recommended for use with more than 5 servos or multiple KPS-15HII (high powered) servos.

KRA83245 KRAFT KB-4L 225 MAH battery pack is specifically designed for use with KPS-18 servos and is not recommended for use with more than two standard servos. See order listing for stock numbers of battery packs available for the Sport Series "A" line.

KRA83250 KRAFT KB-8D optional ni-cad battery for use with Tower Hobbies 3 channel system.

BATTERY CHARGERS



Transmitter and receiver battery packs may be charged independently or simultaneously using either the standard KBC-B charger or the KBC-A (auto) charger.

KRA83125 KRAFT KBC-B charger is a wall mounted, dual output type, with isolated transformer and U.L. Approval for safety.

KRA83110 KRAFT KBC-A charger operates from a 12 volt automobile cigarette lighter and is regulated for constant current output regardless of variation in the automobile's battery voltage. A 10' cord is included.

BATTERY TRANSFORMER

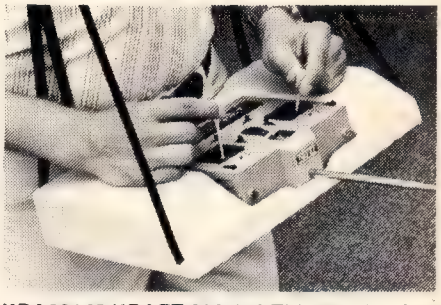
KRA83130 KRAFT Wall plug-in transformer facilitates charging transmitter and receiver batteries. Charge components and charge indicator are located in the transmitter. For use with Sport Series KP-4A, KP-6A, (and 2A systems when converted to ni-cad operation.)

LONG STICKS



KRA20145 KRAFT 200-145 These sticks are designed to increase accuracy when used in conjunction with a transmitter tray. For use on Kraft KPT-7Z, KPT-7C, KPT-5C, KPT-3C, and Sport Series KPT-2AS, KPT-4A, and KPT-6A transmitters.

TRANSMITTER TRAY



KRA20142 KRAFT 200-142 This tray is of the type used for many years by top European fliers. It provides greater smoothness and control accuracy when used with long sticks (P/N 200-145). Vacuum formed rugged Royalite® plastic.

KRA20129	KRAFT 200-129 OFFSET ARMS	1.19	1.15
KRA20141	KRAFT 200-141 ADJ OUTPUT ARM	1.49	1.40
KRA20142	KRAFT 200-142 TRANSMITTER TRAY	19.95	17.95
KRA20145	KRAFT 200-145 LONG STICKS (2)	5.98	5.40
KRA80125	KRAFT 200-125 14II ACCESS PKG	1.98	1.90
KRA80126	KRAFT 200-126 15II ACCESS PKG	1.98	1.90
KRA80162	KRAFT 200-162 LONG ARM-14&15II	.79	.75
KRA80168	KRAFT 200-168 LG WHEEL-14&15II	.79	.75
KRA81110	KRAFT SERVO KPS-11	44.95	34.95
KRA81120	KRAFT SERVO KPS-12	44.95	34.95
KRA81140	KRAFT SERVO KPS-14II	44.95	34.95
KRA81145	KRAFT SERVO KPS-14IIA (A SETS)	39.95	29.95
KRA81150	KRAFT SERVO KPS-15II	44.95	34.95
KRA81155	KRAFT SERVO KPS-15IIA (A SETS)	39.95	29.95
KRA81158	KRAFT SERVO KPS-15H	49.95	38.50
KRA81159	KRAFT SERVO KPS-15HA (A SETS)	44.95	33.75
KRA81180	KRAFT SERVO KPS-18 MINI	59.95	45.95
KRA81185	KRAFT SERVO KPS-18A MINI	59.95	44.95
KRA82040	KRAFT 200-040 11 TRAY-SIDE(1)	1.69	1.55
KRA82041	KRAFT 200-041 11 TRAY-2X1 (3)	3.19	3.00
KRA82042	KRAFT 200-042 11 TRAY-3 ACROSS	3.19	3.00
KRA82044	KRAFT 200-044 12 TRAY-SIDE(1)	1.69	1.55
KRA82045	KRAFT 200-045 12 TRAY-2X1 (3)	3.19	3.00
KRA82046	KRAFT 200-046 12 TRAY-3 ACROSS	3.19	3.00
KRA82088	KRAFT 200-088 14 TRAY-3 ACROSS	3.19	3.00
KRA82089	KRAFT 200-089 14 TRAY-2X1 (3)	3.19	3.00
KRA82090	KRAFT 200-090 14 TRAY-SIDE(1)	1.69	1.55
KRA82092	KRAFT 200-092 15 TRAY-3 ACROSS	3.19	3.00
KRA82093	KRAFT 200-093 15 TRAY-2X1 (3)	3.19	3.00
KRA82094	KRAFT 200-094 15 TRAY-SIDE(1)	1.69	1.55
KRA82101	KRAFT 200-101 14 TRAY-VERT.(1)	1.69	1.55
KRA82102	KRAFT 200-102 15 TRAY-VERT.(1)	1.69	1.55
KRA82120	KRAFT 200-120 TRAY SW ACTUATOR	1.29	1.25
KRA83004	KRAFT 350-004 TRAINER SWITCH	12.95	12.25
KRA83014	KRAFT 200-149 SW HARNESS-4A&6A	7.95	7.25
KRA83015	KRAFT 200-154 MINI SW HARNESS	7.95	7.25
KRA83021	KRAFT 200-121 SW HRNSS 7S & UP	7.95	7.25
KRA83029	KRAFT 200-029 SW HRNSS 72-74	7.95	7.25
KRA83030	KRAFT 200-030 TRAINER CORD	6.98	6.25
KRA83035	KRAFT 200-150 AIL EXT-A SERIES	3.00	2.85
KRA83036	KRAFT 200-036 AIL EXTENSION	3.50	3.25
KRA83037	KRAFT 200-037 SERVO Y CONNECTR	4.98	4.50
KRA83110	KRAFT BATT CHARGER KBC-A(AUTO)	14.95	13.95
KRA83125	KRAFT BATT CHARGER KBC-B	14.95	13.95
KRA83130	KRAFT WALL TRANSFORMER(A SETS)	5.95	5.35
KRA83183	KRAFT 200-183 32IN STD ANTENNA	.98	.95
KRA83184	KRAFT 200-184 18IN SM. ANTENNA	1.98	1.90
KRA83185	KRAFT 200-185 12IN WHIP ANTENA	2.49	2.35
KRA83220	KRAFT BAT PK KB-4E 550 MA STD.	17.95	16.25
KRA83225	KRAFT BAT PK KB-4EA 550 MA STD	17.95	16.25
KRA83230	KRAFT BAT PK KB-4F 1000 MA	31.95	28.95
KRA83235	KRAFT BAT PK KB-4S 450 MA SQ.	17.95	16.25
KRA83240	KRAFT BAT PK KB-4M 450 MA OBLG	17.95	16.25
KRA83245	KRAFT BAT PK KB-4L 225MA MINI	17.95	16.25
KRA83246	KRAFT BAT PK KB-4LA 225MA MINI	17.95	16.25
KRA83250	KRAFT BAT PK KB-8D NI-CAD OPT.	29.95	22.95
KRA84140	KRAFT SERVO KPS-14 180 DEGREE	44.95	34.95
KRA84150	KRAFT SERVO KPS-15 180 DEGREE	44.95	34.95
KRA84158	KRAFT SERVO KPS-15H 180 DEGREE	49.95	38.50
KRA84160	KRAFT SERVO KPS-16 180 DEGREE	49.95	38.50

FUTABA



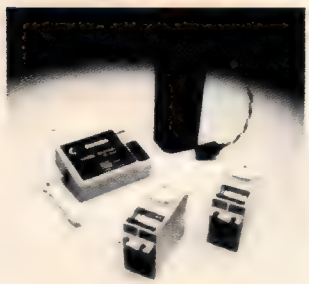
FP-2GA/2 Channels
Dual-stick transmitter, receiver, 2 servos (S12's), dry cell battery case, switch, servo trays and hardware, 27 and 72MHz. $99.95

2GA system also available with S17 servos.

NEW!!
FP-2GS/2 Channels
Dual stick, 2 servos (S17's), drycell system.



FP-2F 2 Channels
Steering wheel transmitter, receiver, 2 servos (S7's), dry cell battery and cases, switch, servo trays and hardware. 27 and 72MHz. $139.95



FP-2E 2 Channels
Dual-stick transmitter, receiver, 2 servos (S16's) dry cell battery cases, switch, servo trays and hardware. 27 and 72MHz. $139.95

2E system also available with S7 servos



FP-3FN 3 Channels
Dual-stick transmitter, receiver, 2 servos (S12 or S17). NiCad battery packs, switch, dual charger, servo trays and hardware. Built-in trainer system. 27 and 72MHz. $199.95

FP-3F 3 Channels
Same as above with 2 S16 or S7 servos and transmitter dry cell battery case. $179.95

New Complete Systems
FP-3S 3-Ch Single stick transmitter, receiver, 2 servos (S20's) dry cell battery cases, switch, servo trays, and hardware. 72 MHz only.



FUT81150	FUTABA FP-S15M SERVO-BALL BRNG	49.95	42.50
FUT81157	FUTABA FP-S15 SERVO-7GN ONLY	49.95	42.50
FUT81160	FUTABA FP-S16 SERVO - MINI	39.95	33.95
FUT81161	FUTABA FP-S16L SERVO - REVERSE	39.95	33.95
FUT81170	FUTABA FP-S17 SERVO - STANDARD	29.95	25.50
FUT81200	FUTABA FP-S20 SERVO-ULTRA MINI	39.95	33.95
FUT81201	FUTABA FP-S20L SERVO-ULTRAMINI	39.95	33.95
FUT81670	FUTABA FP-S7 SERVO WATER-TIGHT	39.95	33.95
FUT81671	FUTABA FP-S7L SERVO (REVERSE)	39.95	33.95
FUT81680	FUTABA FP-S8 RETRACT SERVO	44.95	37.95
FUT81711	FUTABA FP-S11 SERVO (LINEAR)	39.95	33.95
FUT81712	FUTABA FP-S12 SERVO	29.95	25.50
FUT82611	FUTABA TRAY-TYPE T FOR S6	2.50	2.45
FUT82612	FUTABA TRAY-TYPE H FOR S6	1.00	.95
FUT82613	FUTABA TRAY-TYPE V FOR S6	1.00	.95
FUT82623	FUTABA TRAY-TYPE V FOR S7,S12	1.00	.95
FUT82630	FUTABA TRAY - TYPE A FOR S16	3.00	2.85
FUT82631	FUTABA TRAY - TYPE T FOR S16	2.50	2.45
FUT82632	FUTABA TRAY - TYPE H FOR S16	1.00	.95
FUT82633	FUTABA TRAY - TYPE V FOR S16	1.00	.95
FUT82640	FUTABA TRAY - TYPE A FOR S17	1.50	1.45
FUT82644	FUTABA TRAY - TYPE B FOR S17	1.00	.95
FUT83602	FUTABA AEC-1 AILERON EXTENSION	2.95	2.80
FUT83605	FUTABA SWH-1 SWITCH HARNESS	5.95	5.75
FUT83606	FUTABA AEC-2 Y HARNESS	3.95	3.75
FUT83610	FUTABA TRAINER CORD	6.95	6.25
FUT83626	FUTABA SERVO GEAR SET FP-S6	2.00	1.95
FUT83627	FUTABA SERVO GEAR SET FP-S7	2.00	1.95
FUT83629	FUTABA SERVO GEAR SET FP-S16	2.50	2.45
FUT86600	FUTABA FBPK-2 NICAD CONV.-2F	54.95	43.95
FUT86602	FUTABA FBC-2 DUAL CHARGER	11.95	10.75
FUT86622	FUTABA NR-4G 4.8V 225MA NI-CAD	14.95	12.70
FUT86650	FUTABA NR-4C 4.8V 500MA NI-CAD	14.95	12.70
FUT86722	FAP-22A 2CH AIRBORN PK S-16,7	99.95	74.95
FUT86723	FAP-22B 2CH AIRBORN PK S-12,17	84.95	63.95
FUT86732	FAP-32A 3CH AIRBORN PK S-16,7	129.95	97.50
FUT86764	FUTABA FAP-64 6 CH AIRBORNE PK	229.95	165.00
FUT88320	FUTABA FP-2GA 2 CH/2 SERV/2 ST	109.95	82.50
FUT88321	FUTABA FP-2F 2 CH/2 SERV/WHEEL	139.95	104.95
FUT88322	FUTABA FP-2E 2 CH/2 SERVO/2 ST	139.95	104.95
FUT88323	FUTABA FP-2GS 2 CH/2 S-17/2 ST	99.95	76.95
FUT88331	FUTABA FP-3S 3 CH/2 SERVO/1 ST	149.95	112.95
FUT88332	FUTABA FP-3F 3 CH/2 SERV/2 ST	179.95	129.95
FUT88335	FUTABA FP-3FN ALL NICAD	199.95	143.95
FUT88341	FUTABA FP-4FN 4 CH/4 S-17/2 ST	269.95	188.95
FUT88344	FUTABA FP-4FN 4 CH/4 S-16/2 ST	299.95	209.95
FUT88352	FUTABA FP-5FN 5 CH/4 S-16/2 ST	349.95	244.95
FUT88361	FUTABA FP-6FN 6 CH/4 S-17/2 ST	319.95	223.95
FUT88362	FUTABA FP-6FN 6 CH/4 S-16/2 ST	359.95	251.95
FUT88372	FUTABA FP-7GN 7 CH/4 S-15/2 ST	579.95	405.95
FUT89671	FUTABA CRYSTALS SET 72.080 MHZ	11.95	11.50
FUT89672	FUTABA CRYSTALS SET 72.160 MHZ	11.95	11.50
FUT89673	FUTABA CRYSTALS SET 72.240 MHZ	11.95	11.50
FUT89674	FUTABA CRYSTALS SET 72.320 MHZ	11.95	11.50
FUT89675	FUTABA CRYSTALS SET 72.400 MHZ	11.95	11.50
FUT89676	FUTABA CRYSTALS SET 72.960 MHZ	11.95	11.50

FUTABA

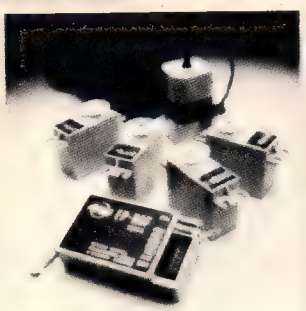


FP-4FN/4 Channels
Dual-stick transmitter, receiver, 4 servos (3—S16/1—S16L). NiCad battery packs, switch, dual charger, servo trays and hardware. Built-in trainer system. 27 and 72MHZ.
$299.95

FP-4FN-S17/4 Channels
Same as above with 3-S17 and 1-S17L servos
$269.95



FP-5FN/5 Channels
Dual-stick transmitter, receiver, 4 servos (3—S16/1—S16L). NiCad battery packs, switch, dual charger, servo trays and hardware. Built-in trainer system. 27 and 72MHz.
$349.95



FP-6FN/6 Channels
Dual-stick transmitter, receiver, 4 servos (3—S16/1—S16L). NiCad battery packs, switch, dual charger, servo trays and hardware. Built-in trainer system. 27 and 72MHz.
$359.95

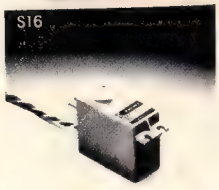
FP-6FN-S17/6 Channels
Same as above with 3-S12 and 1-S17L servos
$319.95

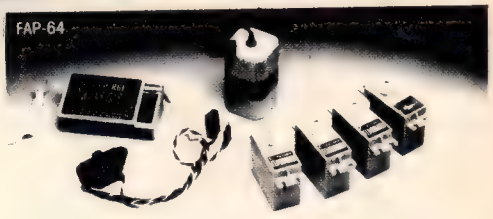


FP-7G/7 Channels
Open-gimbal, dual-stick transmitter, dual conversion receiver, 4 servos (3—S15/1—S15L). NiCad battery packs, switch, dual charger, servo trays and hardware. 27 and 72MHz. $579.95



Servos		All servos draw 8mA @stall except S15/15L (6mA)		
S7	H.D./water tight	.9" x 1.73" x 1.62"	1.7 oz.	41.7 oz./in.
S7L	Reverse S7	.9" x 1.73" x 1.62"	1.7 oz.	41.7 oz./in.
S8	Retract	.9" x 1.73" x 1.62"	1.7 oz.	111.1 oz./in.
S10	Sail winch	3.5" x 1.5" x 2.93"	8.8 oz.	21.8" stroke 3.8"/sec.
S11	Linear action	.75" 1.75" x 1.5"	1.4 oz.	25.1 oz./in.
S12	Standard	.9" x 1.73" x 1.67"	1.8 oz.	38.9 oz./in.
S14	High torque	3.5" x 1.5" x 2.93"	8.8 oz.	167 oz./in.
S15(M)	Ball bearing/H.D.	1.9" x 1.41" x .91"	2.1 oz.	44.5 oz./in.
S15(M)L	Reverse S15M	1.9" x 1.41" x .91"	2.1 oz.	44.5 oz./in.
S15(M)G	Ball bearing/retract	1.9" x 1.41" x .91"	2.1 oz.	55.6 oz./in.
S16	Mini	1.63" x 1.4" x .75"	1.5 oz.	27.8 oz./in.
S16L	Reverse S16	1.63" x 1.4" x .75"	1.5 oz.	27.8 oz./in.
S17	Standard	1.57" x 1.55" x .78"	1.5 oz.	27.8 oz./in.
S17L	Reverse S17	1.57" x 1.55" x .78"	1.5 oz.	27.8 oz./in.
S20	Ultra mini	1.19" x 1.13" x 0.69"	.85 oz.	22.2 oz./in.











Prices and specifications subject to change without notice.

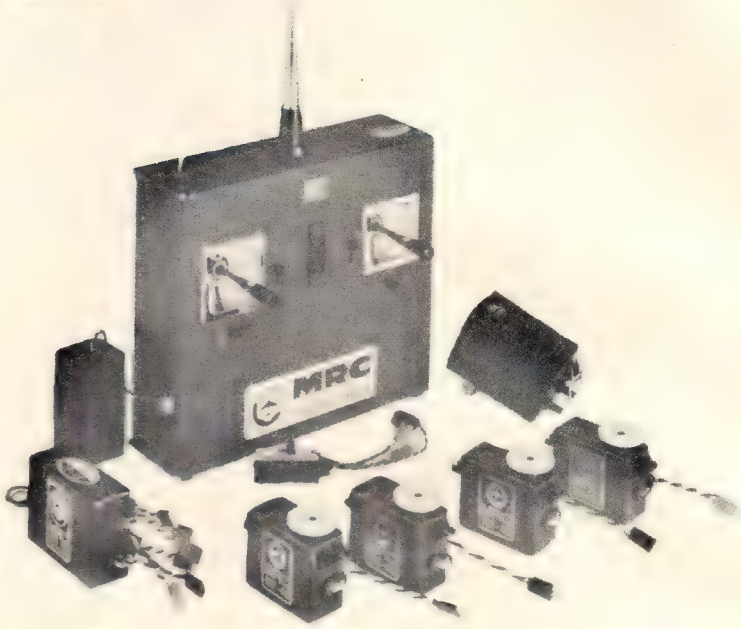
Warranty: Parts and labor—180 days from date of purchase. Warranty Service only available at our California factory.

MRC



MRC 772 TWO CHANNEL SYSTEM

This 2 channel system features open gimbal sticks and lightweight design and comes with two MR-10 or MR-60 servos. Features include transmitter meter, double tuned front end receiver, lead out wires from receiver, low current drain receiver, external servo potentiometer adjustment for centering, and a one year warranty. System uses a total of 12 "AA" pen dry cells that are not included.



MRC 765 FIVE CHANNEL SYSTEM

This 5 channel system comes standard with choice of 4 MR-42 or MR-60 servos, full ni-cad batteries, charger, a carrying case, adjustable closed gimbal sticks, toggle switch, 5th channel, servo accessories, switch harness, and more. This is a good solid system that is competitively priced and it features a full one year warranty.



MRC 775 FIVE CHANNEL SYSTEM

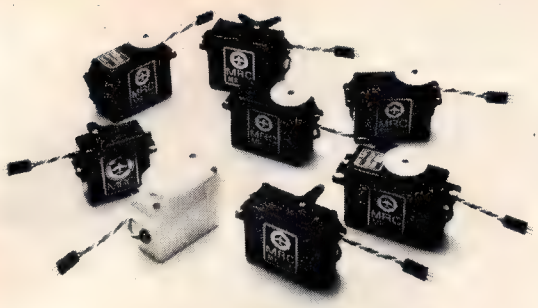
This is M.R.C.'s top of the line system and it is available with choice of 4 MR-42 or MR-60 servos. It features open gimbal adjustable length sticks, carrying case, full ni-cad batteries, toggle switch fifth channel, charger, electronic trim control, servo accessories, switch harness, miniature receiver, and more. Competition level and it has a full one year warranty.



MRC 774 FOUR CHANNEL SYSTEM

This 4 channel system comes standard with a choice of 4 MR-10 or MR-60 servos, full ni-cad batteries, open gimbal dual axis sticks, charger, servo accessories, switch harness, and more. This is a good functional system that is competitively priced with most of the other four channels on the market. It features a full one year warranty.

MRC



MRC SERVOS

MR-10 Wide application, 35 in./oz. torque, 1.7 oz. weight, 1¾" x 7/8" x 1-3/8" size.

MR-42 Fast transit, 36 in./oz. torque, 1.7 oz. weight, 1¾" x 7/8" x 1-3/8" size.

MR-60 Mini sized, 32 in./oz. torque, 1.4 oz. weight, 1½" x ¾" x 1½" size.

MR-70 Ball Bearing, 36 in./oz. torque, 1.8 oz. weight, 1¾" x 7/8" x 1-3/8" size.

SERVO TRAYS

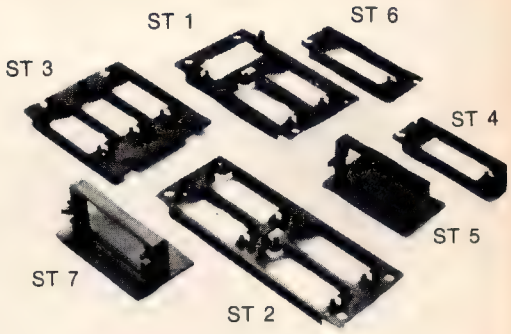
MRC servo trays are made from durable molded plastic and provide a custom mount for your servos. The one-touch snap in mounts make any installation easy.

For MR-10, 20, 30, 42, 70, & 80:

ST1-2 side by side and one crosswise.
ST2-Mounts 4 servos in 2 rows of 2.
ST3-3 servos side by side.
ST4-Vertical aileron mount.
ST5-Horizontal aileron mount.

FOR MR-60 SERVOS:

ST8-Complete servo tray set pictured at right includes 5 trays and hold down clips.
ST9-Single side mount (not pictured).





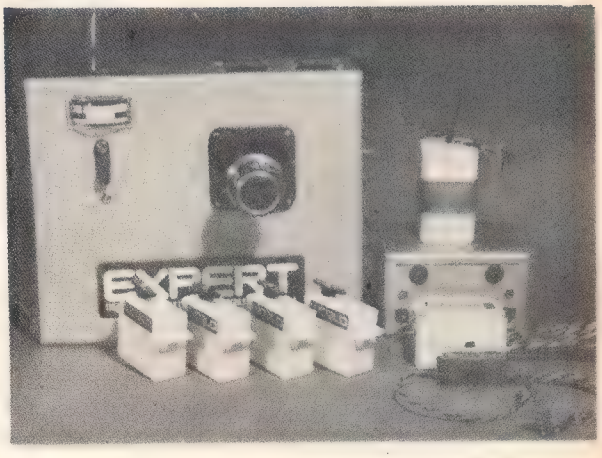
MRC81210	MRC MR-10 SERVO - STANDARD	36.95	31.40
MRC81242	MRC MR-42 SERVO - FAST	44.95	38.20
MRC81260	MRC MR 60 SERVO-MINI	44.95	38.20
MRC81270	MRC MR 70 SERVO-BALL BEARING	59.95	50.95
MRC82010	MRC ST-1 TRAY-2X1	1.98	1.90
MRC82020	MRC ST-2 TRAY-2X2	1.98	1.90
MRC82030	MRC ST-3 TRAY-SIDE BY SIDE	1.98	1.90
MRC82040	MRC ST-4 TRAY-SINGLE VERTICAL	1.98	1.90
MRC82050	MRC ST-5 TRAY-SINGLE HORIZONT.	1.98	1.90
MRC82080	MRC ST-8 TRAY PACKAGE FOR MR60	5.40	5.15
MRC82090	MRC ST-9 TRAY-SIDE MT FOR MR60	1.35	1.30
MRC86207	MRC SWITCH HARNESS W/CHARG JAK	7.95	7.55
MRC88222	MRC #772 2 CH/2 ST/2 SERVOS-10	119.95	89.95
MRC88223	MRC #772 2 CH/2 ST/2 SERVOS-60	119.95	89.95
MRC88225	MRC #765 5 CH/2 ST/4 SERVOS-42	349.95	244.95
MRC88226	MRC #765 5 CH/2 ST/4 SERVOS-60	349.95	244.95
MRC88235	MRC #775 5 CH/2 ST/4 SERVOS-42	379.95	265.95
MRC88236	MRC #775 5 CH/2 ST/4 SERVOS-60	379.95	265.95
MRC88242	MRC #774 4 CH/2 ST/4 SERVOS-10	279.95	223.95
MRC88243	MRC #774 4 CH/2 ST/4 SERVOS-60	279.95	209.95

WORLD ENGINES



Pictured to the left is the Expert Seven Channel dual stick with optional fifth S-11 retract servo.

Pictured to the right is the Expert Five Channel single stick in the standard four servo configuration.



World Engines Expert Series radio control systems feature competition open gimbal sticks, adjustable stick lengths, built-in stand/handle, electronic trims, built-in trainer system, and a full one year warranty. Systems come complete with transmitter, receiver, 4 servos (dual stick 7 channel available with retract S-11 servo as fifth servo), ni-cad batteries, harness, charger, servo trays, and servo grommets with accessories. Systems available with choice of lightweight small S-10 servos, or the heavier larger S-11 servos that are more powerful.

System designation: 1-5 means single stick, five channel; 2-5 means dual stick, five channel; 1-7 means single stick, seven channel etc. Specify frequency and servo type when ordering.

WOR81710	WORLD S-10 SERVO	45.00	38.25
WOR81711	WORLD S-11 SERVO	45.00	38.25
WOR82710	WORLD SERVO TRAY S-10 (FITS 3)	3.50	3.30
WOR82711	WORLD SERVO TRAY S-11 (FITS 3)	3.50	3.30
WOR84711	WORLD S-11 RETRACT SERVO	52.50	44.75
WOR88851	WORLD EXPERT MKII 1-5 W/4 SERV	419.95	249.95
WOR88852	WORLD EXPERT MKII 2-5 W/4 SERV	399.95	245.95
WOR88871	WORLD EXPERT MKII 1-7 W/4 SERV	459.95	272.95
WOR88872	WORLD EXPERT MKII 2-7 W/4 SERV	439.95	262.95
WOR88972	WORLD EXPERT MKII 2-7 W/5 SERV	464.95	271.95
WOR88975	WORLD EXPERT MKII 1-7 W/5 SERV	484.95	289.95

SANWA

These systems offer the best value available for the advanced sport of competition modeler. The realiability of these systems is outstanding as proven by a warranty return rate of less than one percent. High transmitter output power combined with excellent receiver sensitivity and selectivity provide reliable operation even in interference prone areas.

8044 SYSTEM
This 4 channel system includes transmitter, receiver, 4 miniature servos, dual charger, servo trays and accessories.

8054 SYSTEM
Includes everything furnished with the 8044 system. Transmitter has fifth channel with toggle switch. Servo not included.

FEATURES

- Precision ball bearing stick gimbals with smooth precise operation. Ratcheted trim levers.
- Rechargeable nickel-cadmium battery packs for both transmitter and receiver. Dual output charger with led indicators.
- True R/F power transmitter output meter.
- Gold plated positively keyed connectors throughout.
- Voltage regulated transmitter and receiver circuits for maximum interference rejection.



CAT. NO. 8033
This system includes two Cat. No. 80321 and one Cat. No. 80322 servos. Available on all 72 MHz frequencies.



CAT. NO. 8040 AND 8060
These systems include two each Cat. No. 803110 and 803120 servos. Available on all 72 MHz frequencies.



8033 SYSTEM

This high quality 3 channel system includes rechargeable transmitter and receiver batteries, precision ratcheted auxiliary control stick and many other advanced features. For 1978 we are including a third micro servo making this the only complete 3 channel system on the market. Our 8033 system is truly an outstanding value.

8040 SYSTEM

This four channel system provides all the features needed for the advanced sport flier. The outstanding performance of this radio helped Skip Miller to win the 1977 World R/C Soaring Championship. The Sunday flier can be sure that his system will provide the same level of excellence.

8060 SYSTEM

This is the top of the line Cox/Sanwa system. Includes all the features and reliability of the 8040 system with two extra channels. A toggle switch actuated channel for retractable landing gear and a proportional channel for flaps on similar controls.



Our 8020 2 channel system has been a runaway sales success. For 1978 we have added new systems to expand our high value line. Several features have been added to meet consumer requests.

SYSTEM DESCRIPTION

All systems furnished with transmitter, receiver and two micro servos-one 80321 and one 80322, dry battery box and switch, plus frequency flag and accessories. Twelve size AA alkaline cells per battery required. All systems require F.C.C. Citizen Band license.



CAT. NO. 8022
Two channel—single stick. For aircraft use. Available on all 72 MHz frequencies.



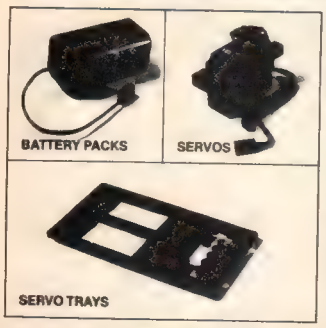
CAT. NO. 8021
Two channel—wheel control. For boat and car use. Loaded auxiliary control with trim adjustment. Available on all 27 MHz frequencies.



CAT. NO. 8020
Two channel—two stick. Lowest cost system for aircraft, boats or cars. Available on all 27 and 72 MHz frequencies.

CAT. NO. 8031
Three channel—single stick. For aircraft use. Auxiliary lever for third channel operation. Available on all 72 MHz frequencies.

COX/SANWA RADIO ACCESSORIES



BATTERY PACKS, CHARGER & CABLE

CAT. NO	DESCRIPTION	CAT. NO	DESCRIPTION
800010	500 mah Square	801000	Aileron Ext
800020	500 mah Flat	801010	Dual Servo Cable
800030	225 mah	801570	Switch Harness
800040	500 mah Tx	801520	Dual Charger
801590	Dry w/Switch		

SERVOS—FOR ALL SYSTEMS

CAT. NO	DESCRIPTION	CAT. NO	DESCRIPTION
803030	Retract	803110	Standard
803060	Waterproof	803120	Standard Rev.
803070	Hi Torque	803210	Micro
803080	Hi Torque Rev.	803220	Micro Rev.

SERVO TRAYS & ACCESSORIES

CAT. NO.	DESCRIPTION	CAT. NO.	DESCRIPTION
801600	Switch Act.	801730	Std. 2 + 1
801610	Micro Ail.	801560	Ass't. Wheels
801620	Micro Dual	801580	Micro Wheels
801630	Micro 2 + 1	801670	Std. Wheels
801710	Std. Ail.		

SAN81306	SANWA	80306	SERVO-WATERPROOF	49.95	39.95
SAN81307	SANWA	80307	SERVO-HI-TORQUE	49.95	39.95
SAN81311	SANWA	80311	SERVO-STANDARD	49.95	39.95
SAN81321	SANWA	80321	SERVO-MICRO	29.95	25.45
SAN81361	SANWA	80361	SERVO-MINI	49.95	39.95
SAN81381	SANWA	80381	SAIL WINCH SERVO	59.95	47.95
SAN82161	SANWA	80161	TRAY-MICRO-AILERON	2.25	2.15
SAN82162	SANWA	80162	TRAY-MICRO-DUAL	2.95	2.80
SAN82163	SANWA	80163	TRAY-MICRO-2X1	2.95	2.80
SAN83100	SANWA	80100	SERVO EXT. CABLE	3.95	3.55
SAN88521	SANWA	2 CH/WHL/2SERV	#8021-DRY	139.95	109.95
SAN88522	SANWA	2 CH/2ST/2SERV	#8020-DRY	99.95	79.95
SAN88523	SANWA	2 CH/1ST/2SERV	#8022-DRY	139.95	109.95
SAN88531	SANWA	3 CH/1ST/2SERV	#8031-DRY	159.95	119.95
SAN88533	SANWA	3 CH/1ST/3SERV	#8033-NIC	229.95	162.95
SAN88542	SANWA	4 CH/2ST/4SERV	#8040-NIC	299.95	209.95
SAN88562	SANWA	6 CH/2ST/4SERV	#8060-NIC	369.95	251.95
SAN88642	SANWA	4 CH/2ST/4SERV	#8044-NIC	279.95	195.95
SAN88652	SANWA	5 CH/2ST/4SERV	#8054-NIC	299.95	209.95

Engines

In a powered aircraft, the powerplant is the heart of the aircraft. Without it, the plane is an inert lump of wood, metal, and paint. The reliability and performance of your engine is of paramount importance. Proper techniques of operation and care from the day it is fresh out of the box will insure that your engine will give you optimum performance for its entire useful life.

Modern model aircraft engines are two-stroke, reciprocating engines. Because they use a glow plug in lieu of a spark plug, points, coil and magneto are not present, but a special fuel is. Called "model airplane fuel", it contains methanol as the base, with varying amounts of nitromethane to increase the energy the fuel can provide. Lubrication is provided by oil mixed with the fuel . . . commonly castor oil, but many new fuels are coming with synthetic oils that are at least as good under most operating conditions.

Typically, the R/C (throttled) engine ranges in displacement from .049 cu.in. to .91 cu.in. (.80 ccm. to 15 ccm.). This offers you a tremendous selection in aircraft size and performance so that you can get the plane you desire. There *are* smaller engines available (down to .010 cu.in. disp. — .16 ccm.), but these do not incorporate throttle control, and are suited only to small, single-channel models.

The new engine: When you get your new engine home, you should first examine it carefully for any obvious defects. Then put it down and carefully read the manufacturer's operating instructions for his recommended break-in procedures. This will help you get off on the right track.

Obtain the recommended fuel, and mount a break-in prop, if one is suggested. Otherwise, select a prop in the middle of the range of props suggested in our prop selection chart on page 247. Now you can begin your break-in of the engine. If the manufacturer has suggested a procedure for the proper way to break-in your engine, by all means, use it.
Note: Ringed engines do not require as long a break-in as do lapped engines (those without rings), and it can be done on the plane in the air . . . run the engine at the point where it starts to break between two-cycle and four-cycle running. Monitor it in the air, and if it starts to slow down before it should run out of fuel, land and richen the mixture, as it is a little too lean. Do not make any maneuvers that put a load on the engine other than level flight loads (and aerobatics). Lapped engines *do* require some bench running . . . at least until they can hold that breaking sound between two- and four-cycle rinning

The carburetor: The carburetor is the device used to adjust the speed of the engine while it is running, and to provide the engine with the proper mixture of fuel and air in the process. When you examine the engine, also take a look at the carb. You will notice various controls and adjustments, the most prominent of which is the throttle arm. This is the big metal arm with the holes in it. It will rotate from about 45 to 90 degrees, with the "barrel" in the carb moving with it. This is the gross speed control. The other adjustments provide the fine-tuning of the carb.

On the side of the carb, usually opposite the throttle arm is the major adjustment . . . the high speed needle-valve. This adjusts the high-speed mixture of the engine. It is this control that allows you to get peak power from the engine while allowing you to prevent an overlean condition. Since the lubricant is in the fuel, you must have a minimum amount of fuel flowing through the engine for each power setting.

Elsewhere on the carburetor is an adjustment for the idle mixture. Refer to the manufacturer's directions for its location on the carb. This adjustment allows you to adjust the mixture of the engine when you are idling it. With high-speed and idle mixtures adjusted, your engine should operate throughout all speed regimes.

A final adjustment is the idle speed screw. This screw adjusts the amount the throttle barrel is closed when the throttle is fully retarded, and is important in getting proper idle.

Some notes on idle adjustment: Make very small changes in idle mixture adjustment, for you may go past the optimum setting to the other side and find you still have a poor idle. This makes the session into the hair-tearing variety (I know, I've had them, too). Listen to the engine while the throttle is retarded. If it suddenly speeds up and then dies, the mixture is too lean. Adjust. If the engine runs while steadily slowing down, it is too rich. Adjust for this condition. If your idle speed is too low, the engine will probably just stop suddenly without a sudden increase in RPM, or without the slow drop in RPM.

Starting problems:

Refuses to fire: Weak or dead battery; bad connector, wires, or burned-out glow plug. Check the circuit, the glow plug should glow bright red. If all above checks out, is engine getting *any* fuel?
Starts, slows down, stops: Engine is too rich. Close the needle valve and flip prop until engine fires. It should run for a few seconds and die. Repeat a few more times until it won't fire, then re-open needle valve to re-start the engine.

Engine starts with lots of power and then runs for a few seconds and dies: Engine is not getting enough fuel . . . mixture is too lean. Open needle valve slightly and try again. If this problem persists, then more is wrong. Check the carburetor for dirt, as it can clog the jet. If necessary, disassemble and clean it. You could also have pinholes in the fuel line, so check carefully, and replace it if necessary. The white silicon fuel line is especially susceptible to pinhole punctures. Finally make sure the fuel line is not pinched inside the tank compartment.

Engine pops and fires, but does not start: It's flooded! You'll have to close the needle valve, and prop it until it fires. It may run for a very short period of time. If this happens, prop it again. It should again fire and run for a short period. Continue to do this until the engine is completely dry. An overlean engine is always easier to start than a flooded one. An electric start can sure help here, but do not apply the starter and crank and crank and crank until the engine starts. Use short "blips" of the starter, as this will turn the engine over several times, and help preserve battery life, spinner life, and engine parts.

When you are sure that the engine is now cleared of excess fuel, re-open the needle valve, and proceed with the manufacturer's starting instructions. Make sure that you do not prime the engine or choke it too much! That was probably your problem in the first place! (It usually is *mine*!)

Cold weather can aggravate any of the above problems, especially flooding . . . the engine tends to backfire, causing the prop to whack you on the finger . . . in cold weather it *hurts*! (An electric starter will help your winter starting woes.)

Engine Terms
ABC: As in "Supertigre G.60 ABC". This means that this engine has an aluminum piston with a brass sleeve that is chrome-plated.
BB: As in "Enya .45 BB". It means "ball-bearing". The crankshaft is supported by ball-bearings to reduce friction and wear.
FAI fuel: Fuel approved by the FAI (Federation Aeronautique Internationale) for use in certain types of contests. Usually composed of 25% oil and 75% methanol.
FI: Front intake.
Lapped: A method of fitting parts that must fit perfectly. Eliminates gaskets; or in pistons, the rings.
Prop nut: The nut that retains the prop.
Prop washer: The washer that is between the prop nut and the prop. It prevents the prop nut from damaging the prop.
RR: "Rear rotor". It means that the intake is behind the engine.
RV: Same as rear rotor.
Schneurle: Pronounced "shnurl". It is a type of internal porting that puts a better mixture of air and fuel into the cylinder. These engines are higher-priced than other engines because they are harder to make.
TV: As in "Enya .60 BB TV". It means "Throttle valve". Same as the use of R/C in referring to an engine . . . it is throttleable.

CARE OF YOUR ENGINE

The way to insure that your engine will deliver optimum power throughout its useful life is to care for it properly. Engine care begins with a careful break-in. When you receive a new engine, it should be run-in according to the manufacturer's recommended procedure. Use the fuel recommended.

During normal operation , you should be careful to use a good, clean fuel, one that has not been stored too long after it has been opened. This is because the alcohol in the fuel absorbs water. Water in the fuel will not permit it to burn correctly, and you'll experience difficulty in getting smooth operation. If the fuel has been stored for any length of time in an unsealed container, get rid of it and use new fuel.

Try to avoid running your engine in dusty areas or on pavement for any length of time. The engine will just suck in all kinds of dirt and crud. This will cause your engine to wear out prematurely. An air filter is a highly recommended item—you can buy a commercial product (see the Perry air cleaner elsewhere in this catalog), or a piece of nylon stocking or pantyhose stretched over the carburetor air intake and held in place by a rubberband or piece of wire.

Keep your engine cool. Overheating can cause your engine to seize while running. This can cause your engine to virtually weld itself together. This, of course, is an excessive condition. Usually, as your engine starts to overheat, it will start to sag out. This will happen when the plane is in level flight. Usually overheating is caused by poor airflow in cowled engines, but it can also result from an overlean condition. If your engine is not running too lean, then you should suspect poor cooling airflow. If necessary, build air ducts and baffles to direct cooling air directly to the engine cylinder.

Because of alcohol's affinity for water, your engine should not be stored with fuel in it. On the last run before you put it up (even for a week), run the engine dry of fuel by pulling off the fuel line and allowing the engine to quit. After it does quit, reconnect the starting battery and prop it a few times. Usually, the engine will fire and run for a few moments before it is really dry of fuel. Do this a few more times, until it will no longer even fire. It is now quite dry of fuel.

At this point, pour a few drops of a good quality light machine oil into the carburetor air intake, and prop the engine briskly with your finger so that the oil is distributed throughout the engine. Wrap the engine in a clean rag and it will store nicely until next weekend.

For longer storage, a heavier coating of oil throughout the engine should be used, and it should be stored in a plastic bag. Extra oil will keep out corrosion, but you'll have to flush out your engine before you try to run it, or you'll find it will be very difficult to get started the next time you try to use it.

Occasionally, you'll see a dark brown accumulation forming on the outside of the cylinder and head, If you look carefully, you'll see it inside, too. On the top of the piston and in the combustion chamber you may find a black build-up. The brown is called "varnish" and the black is carbon. Varnish also accumulates on the inside of the cylinder walls.

This accumulation of junk inside the engine will interfere with the smooth running of it, and should be periodocally removed. This will entail complete disassembly of the engine.

When you have disassembled the engine, it should be cleaned out with a solution of warm soapy water and the use of steel wool. The steel wool you should use is called, "Four-ought". (also called, "0000"). This is a very fine steel wool, and it almost seems like cotton.

Scrub the engine with the steel wool and soapy water until you've cleaned all of the junk off. Now rinse the engine in water that is as hot as you can stand with your bare hands. Shake the parts to remove the water and let them air-dry. When they are dry, oil them with a good, light machine oil and reassemble the engine. It should now look about as it did when it was new.

To make sure the engine will perform as it should, you should read the offerings we have in our book section. There, you'll find books by Clarence Lee, a noted authority in the field of model engines. If you follow his advice, you should find that your engines will deliver a good, long useful life.

TOWER HOBBIES

ASTRO FLIGHT (AFI)



AIRCRAFT ELECTRIC FLIGHT SYSTEMS. These highly efficient, powerful and light weight power systems make electric flight practical. Their design is so advanced that we were granted U.S. Patent No. 3957230. The motor sizes are equivalent to a glow engine of the same displacement. That is, an Astro 15 is equivalent to a 15 Sport Glow engine. It turns the same size prop at about the same RPM. The nicad batteries provide 5 to 8 minutes of powered flight and are recharged at the field in just 15 minutes, using the rapid charger or field charger shown below. We offer these systems in sizes from .020 to .40. The Motors and batteries are available separately.

from A

ASTRO FLIGHT INC.

PIONEERS IN SILENT FLIGHT

13377 Beach Avenue
Venice, California 90291

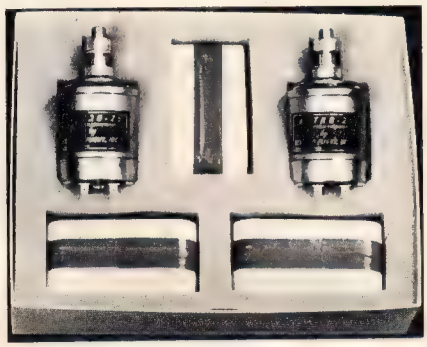
Motor	RPM	Prop.	Motor Wt.	Battery Wt.	Charge Volt	Fuse	Power Duration	Wing Area	Flying Wt.
020FF	11,000	5¼x3	55 gm	63 gm	6 Volts	8 amp	1½ min	200sq in	225 gm
020RC	12,000	5¼x3	55 gm	120 gm	6 Volts	8 amp	5 min.	200-300sq in	450 gm
050	12,000	7x3½ 6x4	158 gm	235 gm	12 Volts	10 amp	5 min	250-350sq in	1 kg
075	14,000	7x4	186 gm	368 gm	18 Volts	10 amp	5 min	300-400sq in	1 kg
10	11,000	8x4 7x4½	250 gm	368 gm	18 Volts	10 amp	5 min	350-600sq in	1.25 kg
15	12,000	8x4 8x5	250 gm	450 gm	24 Volts	10 amp	5 min	400-600sq in	1.5 kg
25	9,500	9x6	350 gm	2@409 gm	24 Volts	14 amp	8 min	600-800sq in	2.25 kg
40	11,000	10x5	387 gm	1000 gm	30 Volts	20 amp	5 min	700-800sq in	3.5 kg



MARINE ELECTRIC SYSTEMS. The marine electric systems use the same motors as our aircraft systems and include a motor mount and cooling fan to permit easy installation. Marine systems batteries are of a higher capacity to allow longer running times. Racing boats have running times of about 5 minutes at full speed and at reduced speeds half hour runs are possible. Three U.S. speed records have been set by Astro systems. The Nicad batteries are charged in fifteen minutes from the rapid charger, or field charger shown below.

Motor	RPM	Prop.	Motor Wt.	Battery Wt.	Charge Volt	Fuse	Power Duration	Boat Size	Displacement
05M	9,000	05*	65 gm	205 gm	6 Volts	6 amp	15 min	DV-10	1 kg
10M	9,000	10	262 gm	409 gm	12 Volts	8 amp	15 min	DV-20	2 kg
15M	12,000	15	262 gm	2@409 gm	24 Volts	10 amp	10 min	DV-20	2.5 kg
25M	10,000	25	390 gm	2@409 gm	24 Volts	14 amp	10 min	DV-40	2.5 kg

*Marine propeller size equivalent to glow engine size propeller.



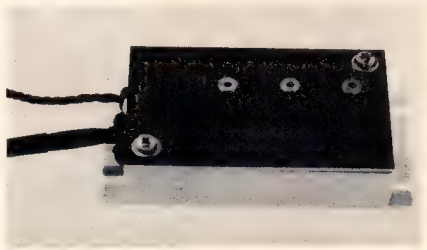
TWIN MOTOR ELECTRIC SYSTEMS. Twin motor systems consist of two motors and a single battery of about twice the capacity used in our single motor systems. Using a single power source insures that one motor will not run down before the other. By installing two twin systems in a single plane, four motor planes can be built. Three engine planes such as the Ford tri motor can be built by adding a third motor to a twin system and running a slightly smaller prop than in the table. No complicated throttle linkage or motor synchronization is required. One speed control is used, just advance the transmitter throttle control and GO!!

Motor	RPM	Prop.	Motor Wt.	Battery Wt.	Charge Volt	Fuse	Power Duration	Wing Area	Flying Wt.
02T	11,000	5¼x3	2@55gm	205 gm	6 Volts	8 amp	5 min	300 sq in	1 kg
05T	12,000	6x4 7x3½	2@158gm	409 gm	12 Volts	10 amp	5 min	400 sq in	1.7 kg
15T	12,000	8x4 7x4½	2@250gm	2@409 gm	24 Volts	10 amp	5 min	600 sq in	3 kg
25T	12,000	8x6	2@390gm	1000 gm	30 Volts	20 amp	5 min	700 sq in	4 kg

SEE PAGE 184 FOR ASTRO FLIGHT FIELD & RAPID CHARGERS

NOTE: Systems below with "W/BAT" are complete systems that include motor(s), battery(ies), and full instructions.

AFI09505	AFI ASTRO 05 MARINE SYS W/BATT	27.95	22.95
AFI09510	AFI ASTRO 10 MARINE SYS W/BATT	69.95	55.95
AFI09515	AFI ASTRO 15 MARINE SYS W/BATT	99.95	79.95
AFI09805	AFI ASTRO 05 ELEC MOTOR ONLY	9.95	7.95
AFI09902	AFI ASTRO 02 ELEC MOTOR W/BATT	22.95	19.95
AFI09905	AFI ASTRO 05 ELEC MOTOR W/BATT	44.95	35.95
AFI09910	AFI ASTRO 10 ELEC MOTOR W/BATT	79.95	63.95
AFI09915	AFI ASTRO 15 ELEC MOTOR W/BATT	99.95	79.95
AFI09925	AFI ASTRO 25 ELEC MOTOR W/BATT	109.95	87.95
AFI09942	AFI ASTRO 02 TWIN MOTORS W/BAT	29.95	23.95
AFI09944	AFI ASTRO 05 TWIN MOTORS W/BAT	54.95	43.95
AFI09946	AFI ASTRO 15 TWIN MOTORS W/BAT	125.00	99.95
AFI09950	AFI ASTRO 25 TWIN MOTORS W/BAT	175.00	140.00
AFI10007	AFI ELECTRONIC SPEED CONTROL	59.95	47.95



ELECTRONIC SPEED CONTROL. This compact solid state speed control plugs into the receiver and offers full proportional speed control from off to full power. It has a 20 amp rating enough for all our systems except the Twin 25.

COX

Cox produces the finest internal combustion engines in the world. Tolerances are closer (less than 20 millionths of an inch), and they run faster–almost 8 times faster than full size reciprocating aircraft engines.

COX00049	COX 450-1 QRC .049 W/MUFF+TANK	14.95	10.90
COX01010	COX 130 TEE DEE .01 W/TANK	20.95	15.75
COX01020	COX 160 TEE DEE .02 W/TANK	20.95	15.70
COX01049	COX 170 TEE DEE .049 ENGINE	20.95	15.70
COX01051	COX 200 TEE DEE .051 ENGINE	20.95	15.70
COX01090	COX 210 TEE DEE .09 ENGINE	24.95	18.70
COX02049	COX 240 MEDALLION .049 ENGINE	16.95	12.75
COX02090	COX 230 MEDALLION .09 ENGINE	20.95	15.75
COX02150	COX 220 MEDALLION .15 ENGINE	26.95	20.25
COX02505	COX 240-1 MEDALLION .049 RC	18.95	14.25
COX02509	COX 230-1 MEDALLION .09 RC	22.95	17.25
COX02515	COX 220-1 MEDALLION .15 RC	28.95	21.75
COX03020	COX 100 PEE WEE .020 W/TANK	11.95	9.50
COX03025	COX 100-1 PEE WEE .020 RC W/TK	13.95	10.35
COX03049	COX 120 GOLDEN BEE .049 W/TANK	12.95	10.00
COX03050	COX 120-1 GOLD BEE .049 RC W/T	14.95	11.20
COX03051	COX 150 BLACK WIDOW .049 W/TNK	13.95	10.45
COX04049	COX 350 BABE BEE .049 W/TANK	10.95	7.95
COX05150	COX 2810 CONQUEST .15 RC	59.95	44.95

REED VALVE

The world's most popular engine for ½-A free flight and control line flying. Powerful, instant starting, smooth and dependable.

Cat. No. 350 .049 (.819cc) Babe Bee
Cat. No. 120 .049 (.819cc) Golden Bee
Cat. No. 100 .020 (.327cc) Pee Wee

REED VALVE
WITH THROTTLE

New Cox throttle-controlled reed valve engines for radio control; carrier event and fun flying. Throttle is operated by a third line of hand control flying.

Cat. No. 100-1 .020 (.327cc) Pee Wee
Cat. No. 120-1 .049 (.819cc) Golden Bee

QRC

An easy starting .049 reed valve engine specially set up for R/C use. Features include an oversize fuel tank with fuel pick-up tube located at center bottom. For quiet operation the engine is equipped with a patented Cox muffler and a specially ported cylinder which delivers maximum power when fully muffled.

BLACK WIDOW

Tank with twin cross vents allows engine to run right side up or upside down. Inside and outside loops, figure eights or any combat action.

TEE DEE
FRONT ROTARY VALVE

The most powerful production engine in its class. Contest performance with Cox dependability, long life and smooth running.

MEDALLION
FRONT ROTARY VALVE

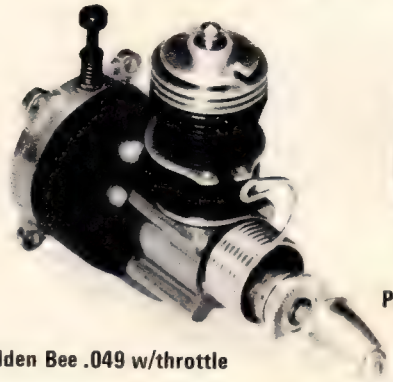
Ideal for general sport and R/C flying. The Medallion always turns in a perfect flight. Fast starting. Suited to both beginners and experts.

MEDALLION
WITH THROTTLE

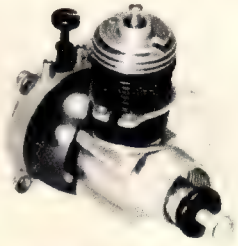
The ideal combination for R/C flying–the popular Medallion sport engine with the new Cox throttle. Throttle designed with minimum number of working parts–offers instantaneous response.

CONQUEST .15 R/C
CAT. NO. 2810

This is the finest "out-of-the-box" engine available for Quarter Midget pylon racing events. It develops the torque and horsepower needed to turn the course, while still retaining a reliable idle and smooth throttle response. A special racing muffler and slotted or straight exhaust extractors are available. For even higher performance the insert type trumpet-shaped glow plug and unfinned head may be installed.



Golden Bee .049 w/throttle



Pee Wee .020 w/throttle



Tee Dee .010



Tee Dee .049

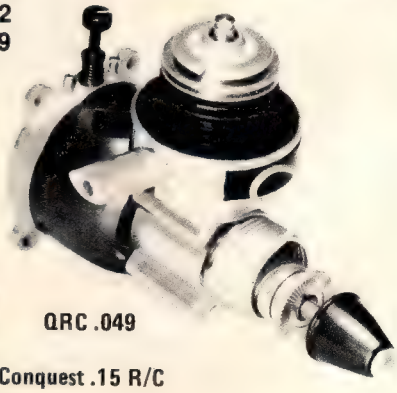


Medallion .049



Medallion .049 w/throttle

See Page 214 for Cox flight and starting kits. See Page 222 for Cox mufflers. See Page 219 for Cox tank mounts.

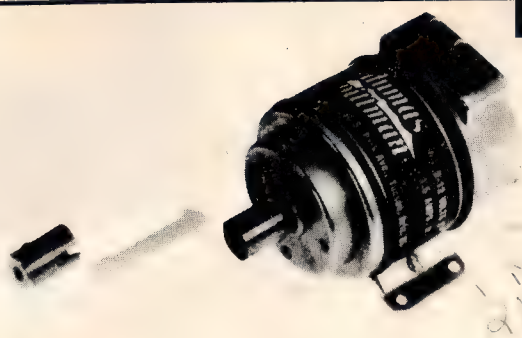


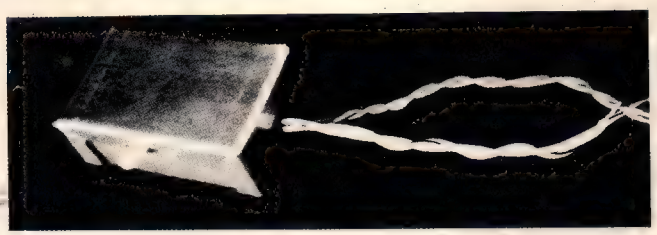
QRC .049



Conquest .15 R/C

DUMAS





DUMAS SPEED CONTROL

At last there is an inexpensive, reliable and dependable proportional speed and direction control for electric powered RC boats. Complete with control arm, operated by any proportional servo, to provide infinitely variable smooth motor speeds in forward and reverse as well as a center "off" position. **No. 503**

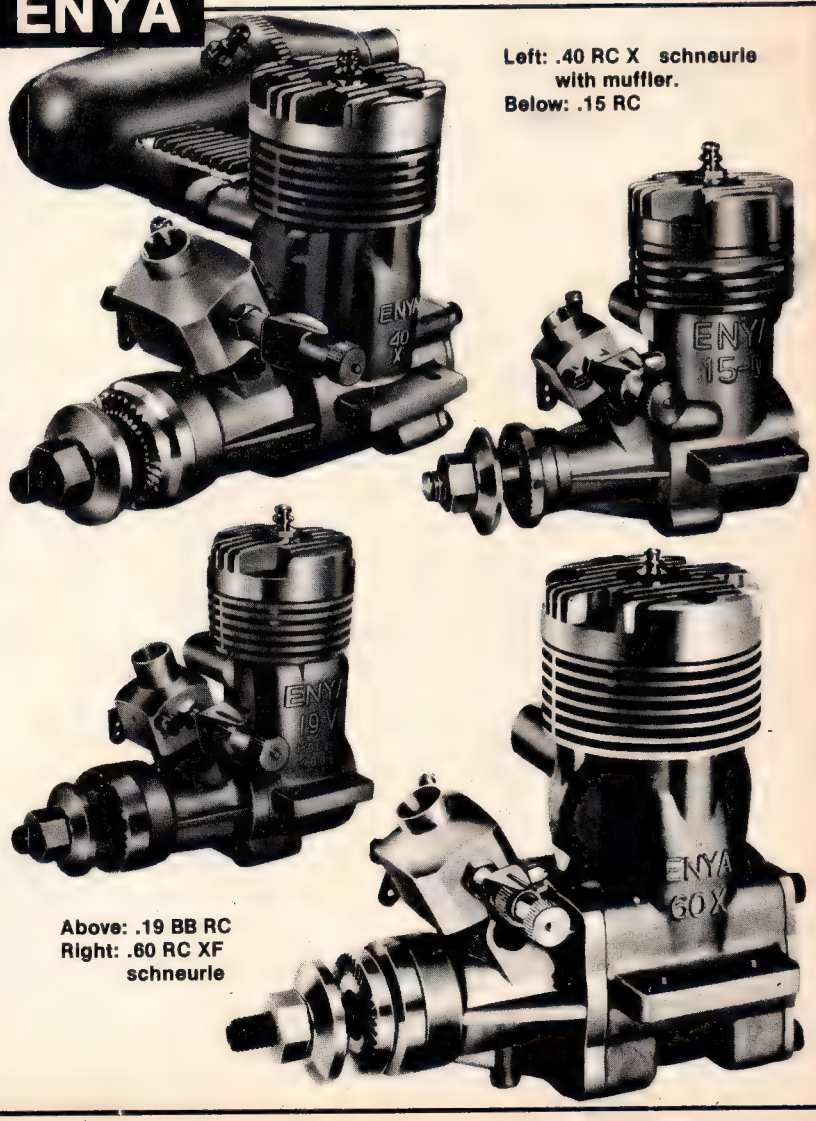
dumas pittman **BOAT MOTORS**

Dumas Pittman "Boatmaster" motors are accepted as the standard of the hobby field. Well established as the highest quality model boat motors available, their power and smooth operation is truly superior. Available in both 6 volt and 12 volt DC versions, Dumas/Pittman motors are enclosed in a corrosion resistant metal housing, and are complete with universal coupling for ⅛" shaft, **Model 9004A-6** (6 volt) **Model 9004A-12** (12 volt).

DUM09060	DUMAS #506 PITTMAN MOTOR 6V	27.50	21.95
DUM09120	DUMAS #507 PITTMAN MOTOR 12V	27.50	21.95
DUM15030	DUMAS #503 SPEED CONTROL	22.95	19.50

ENYA

Enya R/C engines are made in Japan by master craftsmen, and imported into this Country by M.R.C. These engines are available in sizes from .09 to .60 in regular R/C version, ball bearing, marine, and ball bearing schneurle ported versions. All of the engines listed below are R/C engines which means that they are throttle controlled by means of a throttle valve carburetor. The ball bearing versions are designated by a "BB" in the description and this means that the crankshaft is supported by ball bearings in the crankcase. This causes less friction and therefore a higher performance engine. The Marine versions come with a special water cooled head jacket for cooling, and these are regular bushing R/C engines unless otherwise noted as "BB". The .60 RC BB G-8 engine is a conventionally ported .60 that has the special Enya G-8 carburetor, for increased power. It is available as regular or marine R/C. The "X " schneurles are high performance ball bearing schneurle ported engines that come with special mufflers (except .60 RC XF). Enya mufflers are available for the .60XF and all the other non schneurle engines—see page 222.

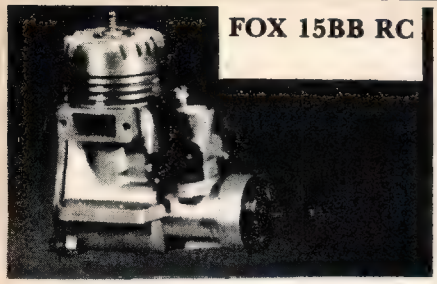


Left: .40 RC X schneurle with muffler.
Below: .15 RC

Above: .19 BB RC
Right: .60 RC XF schneurle

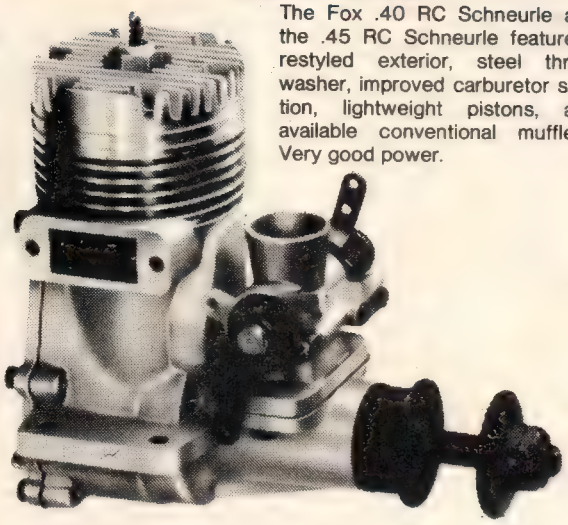
ENY01009	ENYA .09 RC ENGINE	36.98	27.75
ENY01015	ENYA .15 RC ENGINE	40.98	30.75
ENY01019	ENYA .19 RC ENGINE	45.50	34.10
ENY01029	ENYA .29 RC ENGINE	50.50	35.35
ENY01035	ENYA .35 RC ENGINE	53.50	37.45
ENY01040	ENYA .40 BB RC ENGINE	89.98	62.95
ENY01119	ENYA .19 BB RC ENGINE	57.98	40.60
ENY01129	ENYA .29 BB RC ENGINE	66.98	46.90
ENY01135	ENYA .35 BB RC ENGINE	69.98	48.95
ENY01145	ENYA .45 BB RC ENGINE	89.98	62.95
ENY01160	ENYA .60 BB RC ENGINE	117.98	76.70
ENY02009	ENYA .09 RC MARINE ENGINE	39.98	29.95
ENY02015	ENYA .15 RC MARINE ENGINE	46.98	35.25
ENY02019	ENYA .19 RC MARINE ENGINE	51.98	36.40
ENY02029	ENYA .29 RC MARINE ENGINE	57.98	40.60
ENY02035	ENYA .35 RC MARINE ENGINE	60.98	42.70
ENY02040	ENYA .40 BB RC MARINE ENGINE	96.98	62.95
ENY02045	ENYA .45 BB RC MARINE ENGINE	96.98	62.95
ENY02060	ENYA .60 BB RC G-8 MARINE	131.98	85.80
ENY05119	ENYA .19 RC X SCHNL W/MUFFLER	88.98	62.30
ENY05125	ENYA .25 RC X SCHNL W/MUFFLER	92.98	60.45
ENY05140	ENYA .40 RC X SCHNL W/MUFFLER	126.98	82.55
ENY05145	ENYA .45 RC X SCHNL W/MUFFLER	135.98	88.40
ENY05149	ENYA .49 RC X SCHNL W/MUFFLER	131.98	85.80
ENY05161	ENYA .60 RC XF SCHNEURLE	199.98	129.95
ENY08160	ENYA .60 RC BB G-8 ENGINE	124.98	81.25

FOX

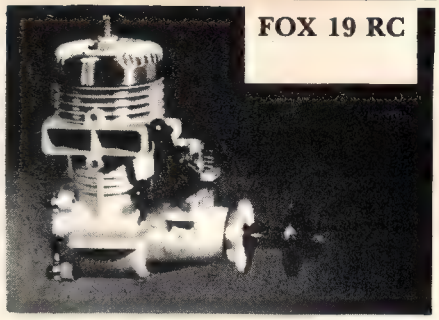


FOX 15BB RC

Easy starting, good idle, non critical handling characteristics with easy installation were the primary considerations in the design of the Fox 15 BBRC The side exhaust configuration fits the airplanes you now have. Power output does not suffer. The Fox 15BB is by far the most powerful side exhaust 15RC on the market and with suitable carouretor changes it will give the most expensive rear exhaust 15s a real run for their money. Install one of these new beauties in your 15 model — it's cooperative attitude will amaze and delight you.



The Fox .40 RC Schneurle and the .45 RC Schneurle feature a restyled exterior, steel thrust washer, improved carburetor suction, lightweight pistons, and available conventional mufflers. Very good power.



FOX 19 RC

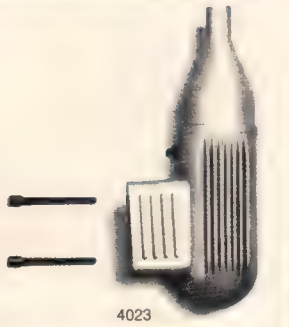
The Fox 19 defies explanation. It has neither ball bearings or schneurle porting yet in Club 20 Racing it has so consistantly outrun all comers that 1977 Club 20 rules handicap Foxes to 6 mm exhaust outlet. Webras, Tigres, Taipans, OSs & Vecos are permitted to run stock. For 1977 the Fox 19 has been given a beauty treatment, an improved carburetor and the crankshaft and rod have been beefed up a bit. We invite you to fit one of these remarkable motors in your model

Fox has a complete line-up of engines from .15 up to .78 displacement. Both .15's are Schneurles, one with bushings, the other with ball bearings. The .19, .25, .29, and .36 are bushing engines. The .40 and .45 are both Schneurles and both are available with bushings or ball bearings (BB). The .60 RC Eagle is conventional ported ball bearing and the .60 RC Hawk is a ball bearing Schneurle. The .78 RC is a ball bearing engine with lots of power. The .34 U/C and .36 BB Combat are U/C engines that are popular. See Fox mufflers on Page 221.

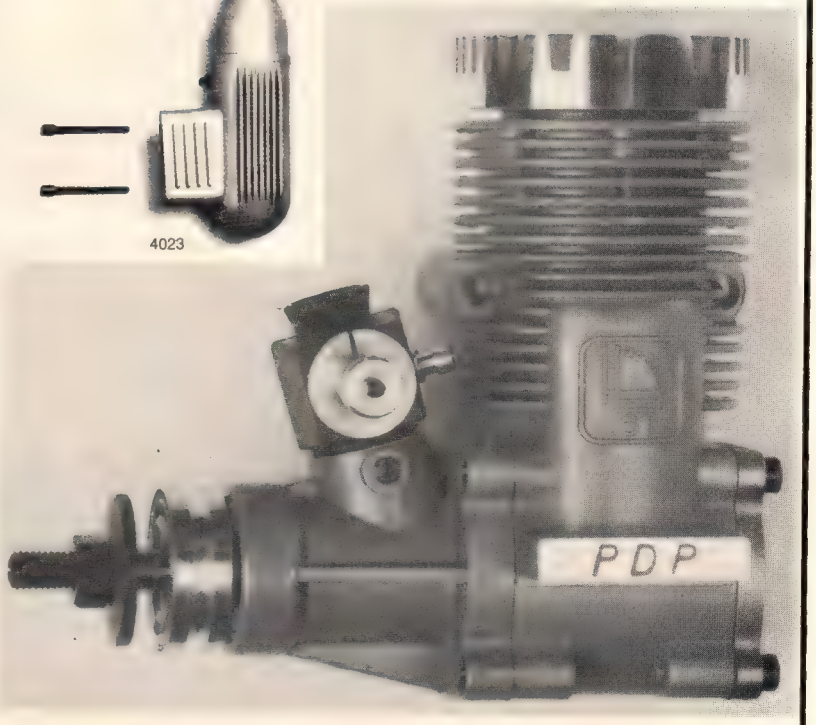
FOX00035	FOX #13500 .35 U/C ENGINE	25.95	18.75
FOX00136	FOX #13700 .36BB COMBAT U/C	44.95	29.95
FOX01015	FOX #21600 .15 RC SCHNEURLE	34.95	24.25
FOX01019	FOX #21900 .19 RC ENGINE	31.95	22.35
FOX01025	FOX #22500 .25 RC ENGINE	31.95	22.35
FOX01029	FOX #22900 .29 RC ENGINE	34.95	24.45
FOX01036	FOX #23600 .36 RC ENGINE	34.95	24.45
FOX01040	FOX #24000 .40 RC SCHNEURLE	45.95	31.00
FOX01045	FOX #24500 .45 RC SCHNEURLE	51.95	35.50
FOX01115	FOX #21698 .15 RC SCHNEURL 2BB	55.95	37.75
FOX01140	FOX #24100 .40 RC SCHNEURLE BB	64.95	43.85
FOX01145	FOX #24600 .45 RC SCHNEURLE BB	64.95	43.85
FOX01160	FOX #26099 .60 RC EAGLE ENGINE	64.95	43.85
FOX01161	FOX #26199 .60 RC HAWK ENGINE	84.95	55.20
FOX01178	FOX #27800 .78 RC ENGINE	96.95	63.00

HB ENGINES

HB Engines come in a full line-up of sizes ranging all the way from a .12 to a .61. Regardless of version, all engines under .40 size come with a muffler and all engines .40 size and up do not come with a muffler. Muffler #4023 is available for those engines. All HB engines come standard with a Perry carb. The conventionally ported R/C version is offered in .12 through .61 sizes. The Marine versions are offered in all sizes except .15 and .50. The PDP (Perry Directional Porting) versions are available in the .40 and .61 size both as standard and marine R/C. The PDP system offers additional inlet slots in the cylinder sleeve and a channel in the crankcase which increases power and speed. All marine versions come with cooling water jacket and flywheel.



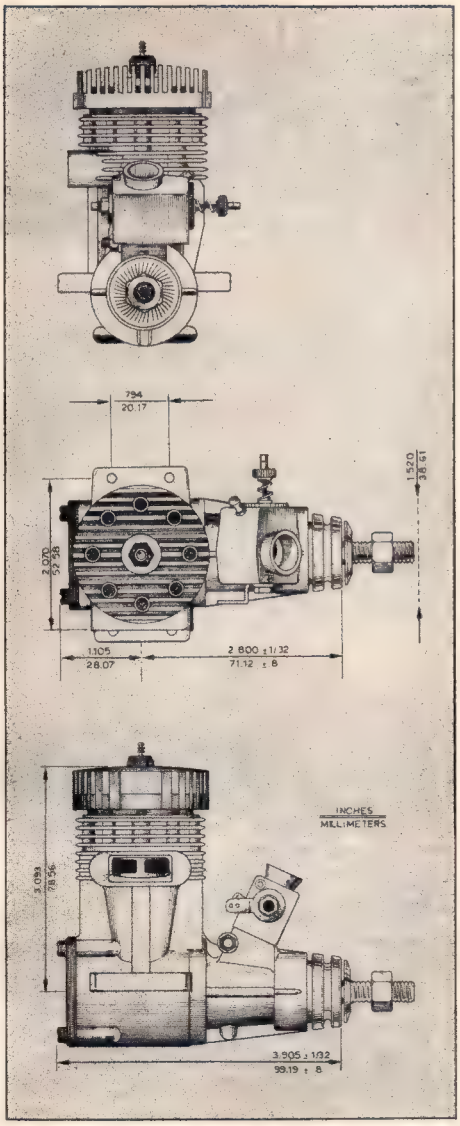
4023



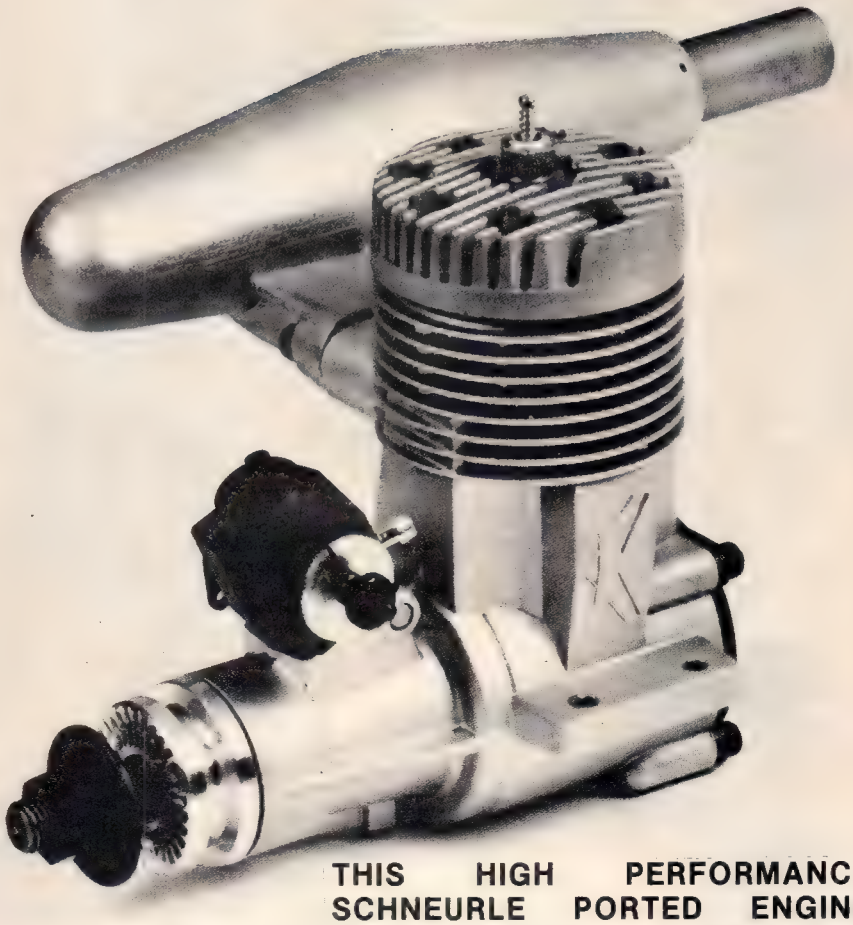
HB .61 RC PDP ENGINE WITH PERRY CARB

HBE01112	HB #1200 .12 RC W/MUFFLER	32.40	26.55
HBE01115	HB #1500 .15 RC W/MUFFLER	35.10	28.75
HBE01120	HB #2000 .20 RC W/MUFFLER	40.70	33.35
HBE01125	HB #2500 .25 RC W/MUFFLER	45.40	37.20
HBE01140	HB #4000 .40 RC	56.40	44.95
HBE01150	HB #5000 .50 RC	61.90	49.50
HBE01161	HB #6100 .61 RC	83.20	66.55
HBE01240	HB #4200 .40 RC PDP	68.40	54.70
HBE01261	HB #6300 .61 RC PDP	95.20	74.25
HBE02112	HB #1300 .12 RC MARINE W/MUFF	38.90	31.90
HBE02120	HB #2100 .20 RC MARINE W/MUFF	52.70	42.15
HBE02125	HB #2600 .25 RC MARINE W/MUFF	56.40	44.95
HBE02140	HB #4100 .40 RC MARINE	71.20	56.95
HBE02161	HB #6200 .61 RC MARINE	98.00	76.45
HBE02240	HB #4300 .40 RC PDP MARINE	83.20	66.55
HBE02261	HB #6400 .61 RC PDP MARINE	109.90	85.70
HBE02421	HB #2200 .21 RC PDP (RACE CAR)	Price unavailable at press time.	
HBE16023	HB #4023 MUFFLER (FITS 40-61)	9.10	7.75

KRAFT



KRAFT .61 R/C ENGINE



THIS HIGH PERFORMANCE SCHNEURLE PORTED ENGINE COMES WITH PERRY CARBURETOR AND SPECIAL MUFFLER.

ACCESSORIES

See Page 215 for the Kraft custom air filter that fits this engine. It will greatly increase engine life with minimum power loss. See Page 220 for the Kraft Aluminum engine mount that is specially designed for this engine. It comes already drilled and tapped for the Kraft .61 engine.

ABOUT THIS ENGINE

When Kraft decided to manufacture an engine they did so with one simple idea in mind: build absolutely the finest and the most powerful .61 ever built. With that as a foundation this engine was the result. A Schneurle ported, double ballbearing engine complete with a Perry carb and special design muffler that is made of absolutely the finest materials and made to the highest quality specifications known in the industry. That's what this engine is. Very simply, this engine is first class all the way.

The Kraft .61 has the greatest usable horsepower of any R/C .61 engine. This means greater pulling power for effortless, more constant speed aerobatic patterns even with large heavy models.

Reliability in workmanship and materials is what you would expect from Kraft. The crankcase is an expensive investment casting rather than die casting. This results in a much stronger case at the same weight. The massive hardened steel crankshaft rotates on two special ball bearings of which the front is sealed and shielded to eliminate blow-by and dirt contamination. The connecting rod is forged with phosphorous bronze bushings at both ends. The piston is also forged and domed for both power and crown strength. The backplate is sealed by an "O" ring instead of an ordinary paper gasket.

Although introduced less than two years ago, the Kraft .61 has already established itself as the leading .61 contest engine with many victories to its credit.

Contest winning is, of course, an important indicator of engine performance. Perhaps more important to the day-to-day sport flyer is long life, dependability, and ready availability of parts and service. These are assured with the Kraft .61 because it is produced in the U.S.A. by a dedicated group of R/C enthusiasts. We believe it to be the world's best .61 R/C engine.

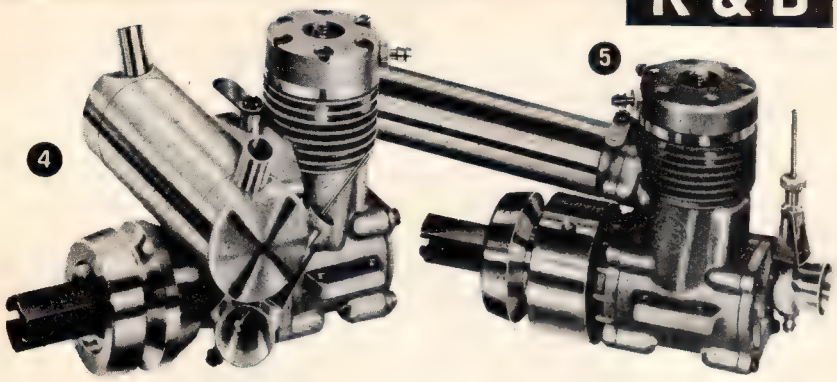
SPECIFICATIONS

Bore	.940
Stroke	.875
Displacement	.607
Horse power	1.6 at 15,500 RPM
Weight, with muffler	18 oz.

Double ballbearing; Schnuerle-ported with boost port.

KPA05161 KRAFT .61 RC ENGINE W/MUFFLER 99.95 74.95

K & B



4 K & B 3.5cc (.21) R/C ENGINE Designed specifically as a marine engine. Powerful, rugged and dependable. Will provide countless hours of high-performance operation. Easy to start, no break-in required. Precision machined U-Joint Nuts fit most existing ball drives.

Features include: • Efficient Muffler — under 90 decibels • ABC Cylinder and Piston • Ball Bearings • Water-Cooled Head • Rear Exhaust — Butterfly Throttle • Rotatable Case (center block)—permits changing exhaust from forward to aft position. **Cat. No. 8384**

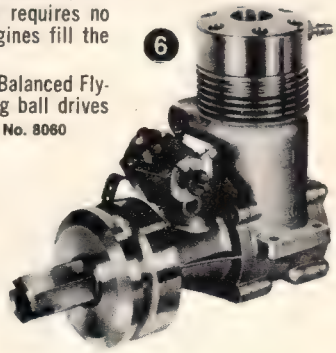
5 K & B 6.5cc (.40) RC/RS III MARINE RACING ENGINE A new all-marine 6.5cc engine. Equipped with rear exhaust, rear rotor, and exhaust—butterfly throttle. It has been thoroughly tested in many R/C races.

Features include: • ABC Piston & Liner — for long life • Advanced By-Pass Porting • High Density Aluminum Die Casting — for greater strength • Water-Cooled Head • Ball Bearings • Rotatable Case (center block) — permits changing of exhaust from forward to aft position • Con Rod — bushed both ends.

Cat. No. 9040

6 K & B .40 R/C MARINE SPORT POWERPLANT An ideal, dependable, all-purpose engine. It has superb power, is easy to start and requires no break-in. For consistent peak performance in all marine engines fill the tank with K & B fuel. Your choice of six blends.

Features include: • Perry Carburetor • Water-Cooled Head • Balanced Flywheel • Precision-Machined U-Joint Nut — fits most existing ball drives • Install, start, and go-o-o-o! **Cat. No. 8060**

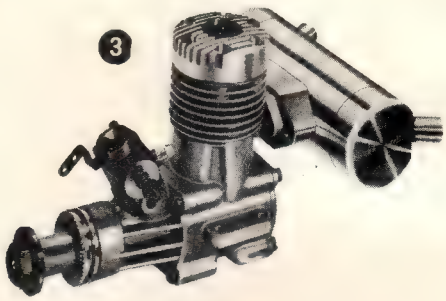




1 K & B 3.5cc (.21) OUTBOARD ENGINE The first of its kind. Destined to set a pace others will follow! With ABC piston and liner, this water cooled competition engine is the ultimate in outboard engines. It offers the superior control characteristics of outboard drive.

It features: • Ball Bearings • Flywheel designed for cup electric starter • Close, simple steering and throttle linkage • Underwater pick-up • Integral cavitation plate and skeg • Tough transom mounting plate to withstand stress of flat-out racing.

Cat. No. 8382

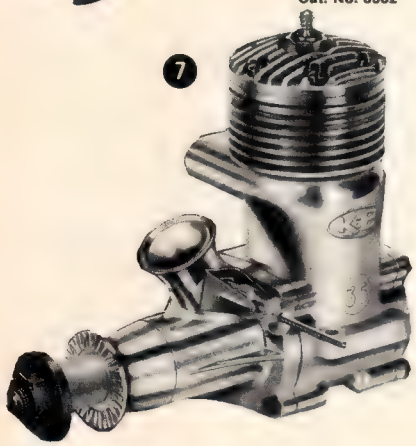


3 K & B 3.5cc (.21) R/C ENGINE

A real workhorse for its size. Rugged, powerful and dependable. Will give all competitors in its class size a "run for the money." No break-in period required. Easy to start. Another "honey" of a K & B engine!

Features include:
• Efficient Muffler — under 90 decibels • ABC Cylinder and Piston • Ball Bearings • Advanced By-Pass Porting • Perry Carburetor • High Density Aluminum Die Casting.

Cat. No. 8380



7 K & B .35 *"Series 75"*

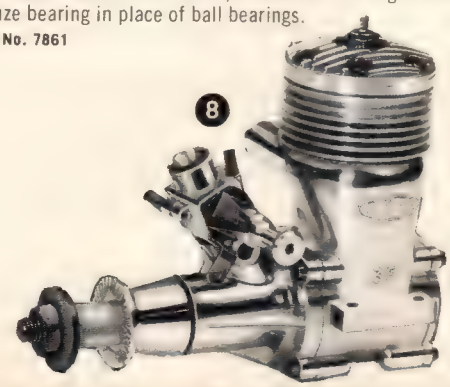
Featuring a "plain" bearing, it has been specifically designed for all AMA classes where a .35 standard plain bearing engine is required. Has a "squish band" racing head and a safety crank stud . . . practically eliminates the possibility of breaking or even bending the crankshaft. Tops in its class . . . for power, performance, and dependability.

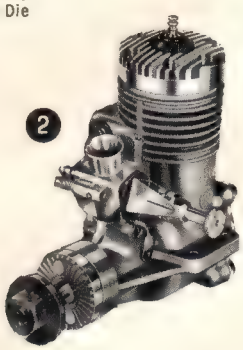
Cat. No. 7860

8 K & B .35 R/C — FOR THE SPORT MINDED FLYER

A front rotor type engine featuring a light aluminum piston with the Dykes ring which has been so successful in our #8011. .40 R/C. This new .35 R/C also utilizes the same crankcase block as the .40 R/C but with a long wearing bronze bearing in place of ball bearings.

Cat. No. 7861





2 K & B VECO .19R/C

The "squish band" head machined from solid aluminum bar stock, extra deep fins for cooler running and increased speed, machined surfaces of head and crankcase eliminate need for a head gasket. Includes coupled exhaust/intake throttle control linked to carburetor for smoother idle . . . precision ball bearings.

Cat. No. 6712

K & B

15 K & B .61R/C WITH MUFFLER

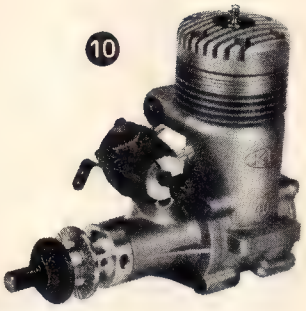
The improved K & B .61 features a new crankshaft that eliminates the necessity of drilling or enlarging hole in propellers. A top performing pattern engine, it competes with the best. The new, improved muffler is even quieter but in no way inhibits the performance of the engine. It is rugged in construction, contemporary in design, and is fitted with a pressure tap.

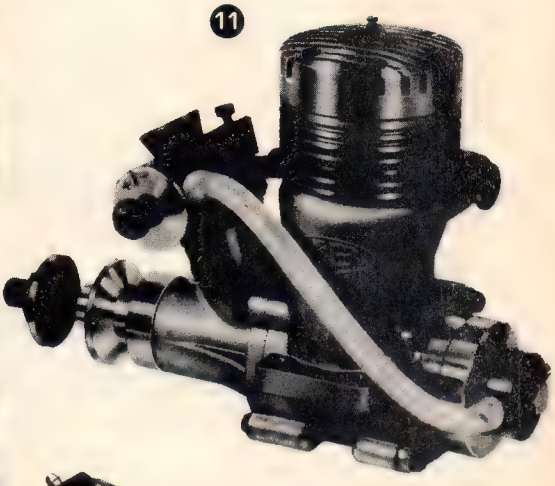
Cat. No. 6525

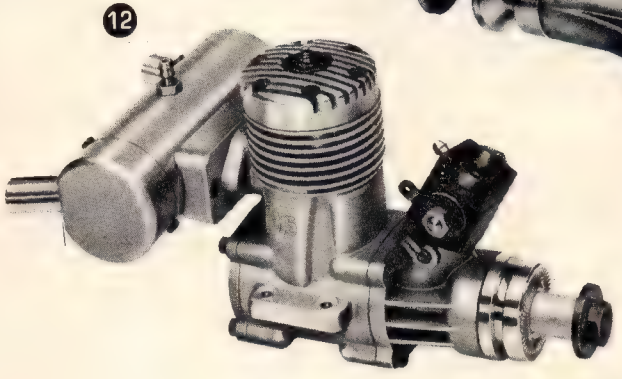
16 K & B .61R/C WITH PERRY PUMP/REGULATOR

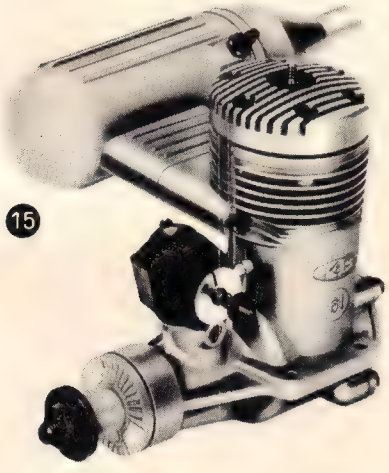
Incorporates the most advanced step in model engine fuel systems to take place in many years . . . equipped with a Perry Pump/Regulator and a larger Perry Carburetor specifically designed to be used with the Pump/Regulator system. Increases the h.p. to equal or surpass many .61 engines made today. Fuel is not drawn but fed into the carburetor through pressure by the regulated pump unit. Regulator adjustable for the most efficient operation to match various flying conditions. Positioning of the fuel tank is no longer critical . . . even wing tanks can be used and still maintain a reliable fuel feed. Easy to start. Flip the prop and fuel will start to flow.

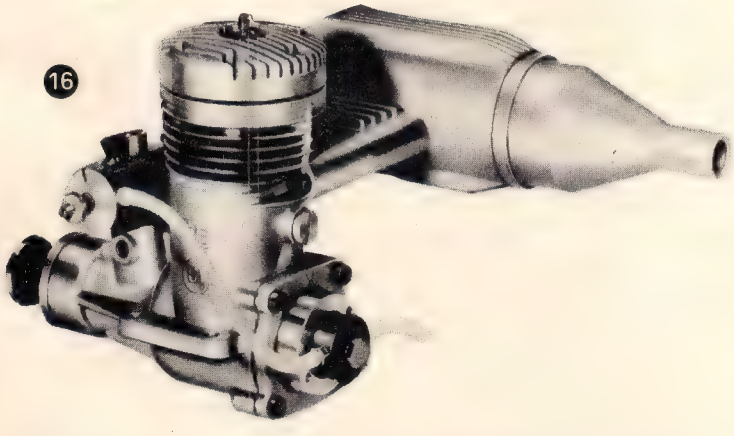
Cat. No. 6535











10 K & B .40R/C

A front rotor type engine designed for Pattern Flying. It incorporates a large by-pass for more power produced by a unique machining process.

Features include:

• Special Perry carburetor — coupled exhaust/intake throttle control linked to carburetor provides instant response . . . from slow, smooth idle to top speed • "Squish band" racing head — now standard • Exclusive K & B no tension, single ring and aluminum piston — no long break-in period required.

Cat. No. 8011

11 K & B .40 R/C WITH PERRY PUMP/REGULATOR

The same K & B .40 R/C as the outstanding No. 8011 but equipped with a Perry Pump/Regulator* and a larger Perry Carburetor specifically designed to be used with the Pump/Regulator system . . . gives a 1000 rpm increase.

*For technical data see the K & B .61 R/C descriptive copy.

Cat. No. 8360

12 K & B 6.5cc (.40) R/C FRONT ROTOR

Unbelievable horsepower in a front rotor R/C engine . . . for R/C Scale, R/C Pattern and ideally suited as a ducted fan power plant.

Features include:

ABC Cylinder & Piston • Rear Exhaust • Muffler • Perry Carburetor • Ball Bearings • Con Rod — bushed both ends • Advanced By-Pass Porting • High Density Aluminum Die Casting.

Cat. No. 9000

K & B engines are domestically made in California. They are excellent engines and represent some of the biggest values in the engine market. Parts are readily available from the factory which is a real advantage. Some of the engines come with mufflers as shown. See page 222 for K & B mufflers for the .19 and .61. We recommend a Semco 202-FS muffler with a 4-M adaptor for the K & B .40 R/C (see page 224 for Semco).

K&B00035	K&B	#7860	.35 U/C ENGINE	29.95	20.9
K&B01035	K&B	#7861	.35 RC ENGINE	34.95	24.50
K&B01040	K&B	#8011	.40 RC ENGINE	67.50	44.95
K&B01041	K&B	#8360	.40 RC PRESSURIZED	95.00	62.95
K&B01119	K&B	#6712	.19 RC ENGINE	50.00	34.95
K&B01161	K&B	#6525	.61 RC W/MUFFLER	90.00	59.95
K&B01162	K&B	#6535	.61 RC PRESS. W/MUFF	115.00	76.50
K&B02221	K&B	#8382	.21 OUTBOARD MARINE	99.50	69.95
K&B02321	K&B	#8384	.21 RC INBRD MARINE	69.50	50.75
K&B02340	K&B	#9040	.40 RC SCHN MARINE	99.50	75.50
K&B02440	K&B	#8060	.40 RC SPORT MARINE	75.00	54.9
K&B05121	K&B	#8380	.21 RC SCHNRL W/MUFF	67.50	46.60
K&B05140	K&B	#9000	.40 RC FR R-EX SCHNL	110.00	7.00

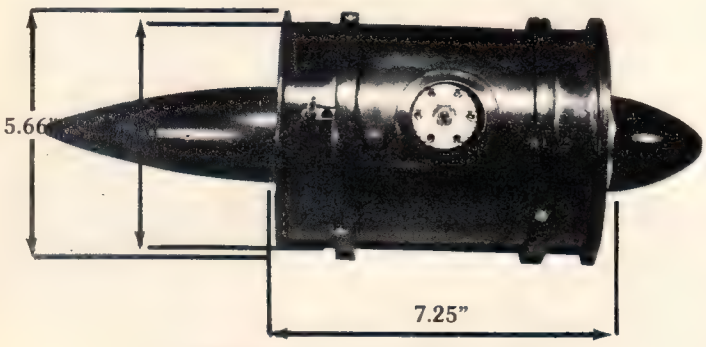
MIDWEST

AXIFLO DUCTED FAN KITS

ADDS NEW DIMENSION TO FLYING!

MID17049	MIDWEST RK-049 AXIFLO FAN	38.95	31.15
MID17400	MIDWEST RK-40 AXIFLO FAN	48.95	38.95

AXIFLO RK-40 #803



MIDWEST AXIFLO RK-40 FAN FOR .40 DISPLACEMENT CLASS ENGINES

Technical Specification

Dimensions

Length (tank and spinner not included)	7.25 in.
Duct inside diameter	5.10 in.
Barrel outside diameter	5.16 in.
Ring diameter (4)	5.66 in.
Rotor diameter	5.04 in.

Rotor
5 blades
Proof spin-tested to 30,000 RPM (no failures)

Stators
6 blades (3 forward, 3 aft)
Twisted to recover whirl energy
Cylinder head aerodynamic fairing

Tank
3 line
Polyethylene
9 oz. capacity
Williams fittings

Weight

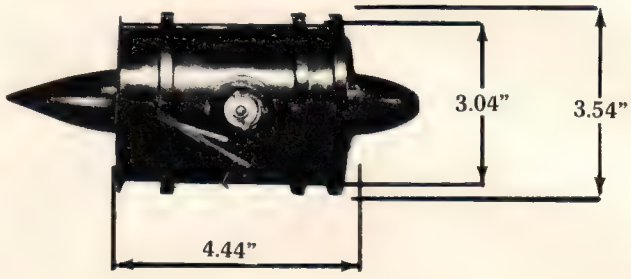
Less engine	16 oz.
With engine	approx. 27 oz.

Static Thrust (typical .40 class engines)

	Engine/RPM		Fuel % NITRO	Thrust LB.	Recommended Max. Model Weight* LB.
K&B	.40S	18,000	25%	6.65	9.0
		19,000	50%	7.31	10.0
OS	.40SR	17,200	FAI	6.10	8.4
		19,000	50%	7.27	10.0
WEBRA	Speed .40 R/C	17,200	25%	6.10	8.4
K&B	.40 R/C	15,800	25%	5.00	6.8
OS	.40 FSR	16,600	25%	5.60	7.7
HP	.40 RPR	16,300	FAI	5.53	7.6
WEBRA	Speed 40 Pylon	19,800	?	7.75	10.6

NOTES:
(1) All above using peter Chinn's engine data except for WEBRA speed .40 Pylon, which was manufacturer's data.
(2) * See RCM Ducted Fan Article by Robert W. Kress, Fall '77.

AXIFLO RK-049 #801



MIDWEST AXIFLO RK-049 DUCTED FAN FOR .049 DISPLACEMENT CLASS ENGINES

Technical Specification

Dimensions

Length (tank and spinner not included)	4.44 in.
Duct inside diameter	3.00 in.
Barrel outside diameter	3.04 in.
Ring diameter (4)	3.54 in.
Rotor diameter	2.96 in.

Rotor
5 blades
Proof spin-tested to 30,000 RPM (no failures)

Stators
6 blades (3 forward, 3 aft)
Twisted to recover whirl energy
Cylinder head aerodynamic fairing

Tank
3 line
Polyethylene
1.5 oz. capacity
Williams fittings

Weight

Less engine	3.9 oz.
With engine	approx. 5.7 oz.

Static Thrust

Engine/RPM			Fuel % NITRO	Thrust oz.	Recommended Max. Model Weight* oz.
Cox TD	.049	20,000	25%	16.00	26-28

NOTES:
(1) Above using Peter Chinn's engine data.
(2) * See RCM Ducted Fan Article by Robert W. Kress, Fall '77.

Axiflo is lightweight for maximum aerodynamic efficiency, low in cost and all parts are ready for assembly — and **you** can put your Axiflo together in two evenings.

Available in four sizes, .049, .20*, .40, and .60*, with integral tailcone fuel tank and operable with or without tank pressure — fully throttleable. Front or rear rotor engines can be used and motor mount can be removed to change engines. For good stock engines, **racing engines are not required** but can be used, if desired. Matching model kits of jet aircraft are planned.

* These Sizes Will Be Available Later.

MRC—SUEVIA



A POWERHOUSE TO HANDLE YOUR BIGGEST MODEL

MRC-SUEVIA SCHNEURLE PORTED 25ccm (1.5cu.in.) R/C ENGINE WITH MUFFLER

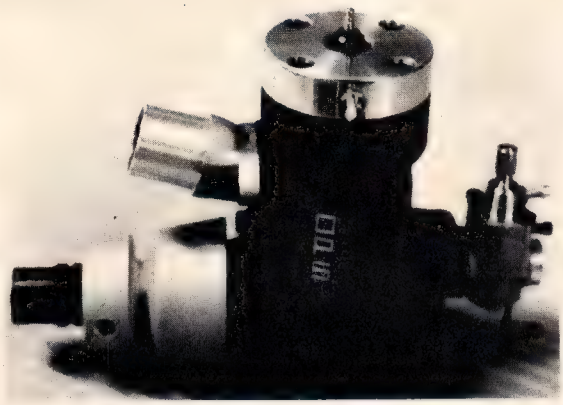
- Smooth running with low vibration
- Schneurle porting for high torque and power
- Easily swings an 18" propeller
- Extremely quiet muffler comes with engine
- Achieves high torque and power at low RPM
- Crankshaft supported by roller and ball bearings
- Front and rear housing interchangeable
- Uses standard R/C Long glow plugs
- Carburetor rotates 360 degrees to accommodate varied and difficult installations
- Outstanding quality and master machineing

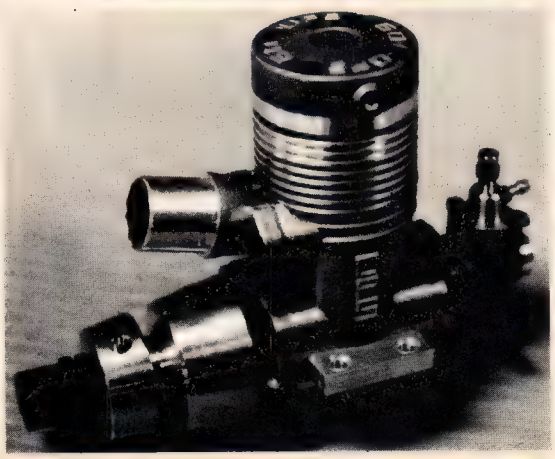
SPECIFICATIONS:

- Hardened cylinder liner
- Aluminum piston and piston ring
- Stroke: 27 mm.
- Bore: 34 mm.
- RPM: 1,700-12,000; 3 H.P. at 11,000 RPM
- Weight without muffler about 2.4 lbs.

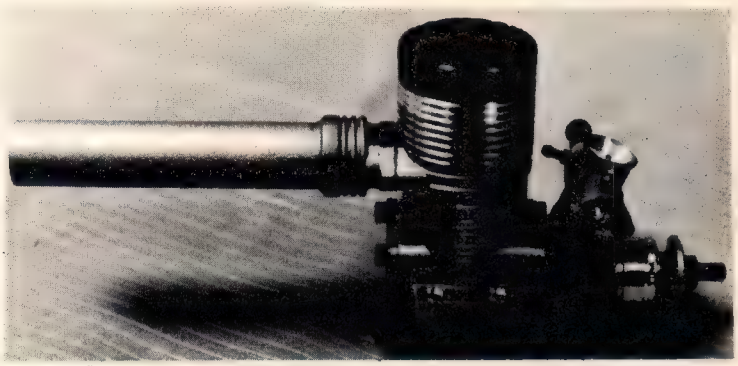
MRC05115	MRC SUEVIA 1.5 RC SCHRL W/MUFF	296.95	237.50

O. P. S.





ops "BIG RED .60"

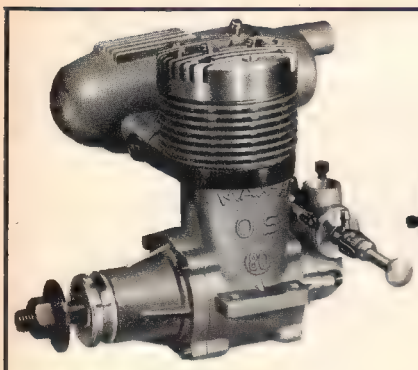


Above: O.P.S. .60 RC Big Red with Tuned Pipe
Above Left: O.P.S. .40 RC Marine (Tuned Pipe not pictured)
Left: O.P.S. .60 RC Marine (Tuned Pipe not pictured)

All three engines come with OPS slide valve R/C carburetor, muffled tuned pipe, A.B.C. piston and sleeve assembly, and Schneurle porting. Marines come with flywheel as shown.

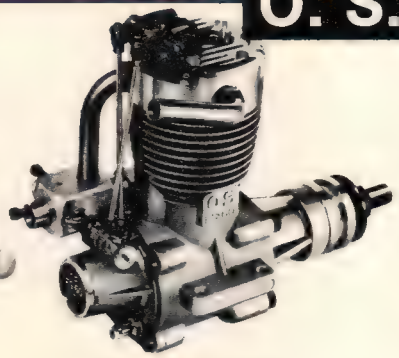
OPS02140	OPS .40 RC MARINE W/TUNED PIPE	142.00	119.95
OPS02160	OPS .60 RC MARINE W/TUNED PIPE	179.00	149.95
OPS05160	OPS .60 RC BIG RED W/PIPE	155.00	129.95

O. S. MAX



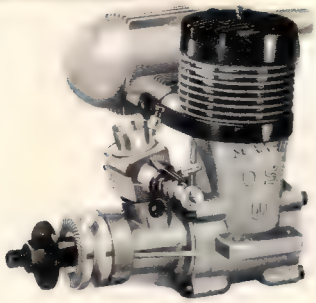
.80 RC RV

This rear rotor ball bearing R/C engine comes complete with a muffler. This work horse is easy starting, very powerful, and has a good idle.



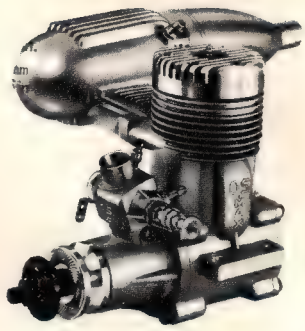
.60 4 CYCLE RC

This rear rotor ball bearing R/C engine features overhead valves and is extremely economical and powerful. Muffler is not included.



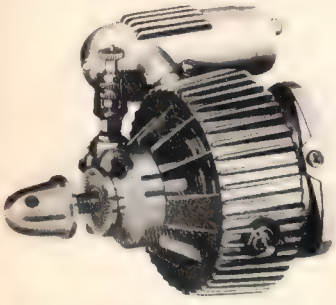
.40 RC & H60F RC

Both are front rotor ball bearing R/C engines that come complete with mufflers. The H60F is also known as the .60 Blackhead. Both are conventionally ported.



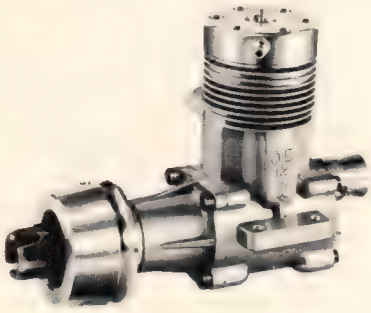
.20, .40, .45, .60 FSR RC & .60 FSR RC PRESSURIZED

These five engines are all front rotor Schneurle ported ball bearing R/C engines that come complete with mufflers.



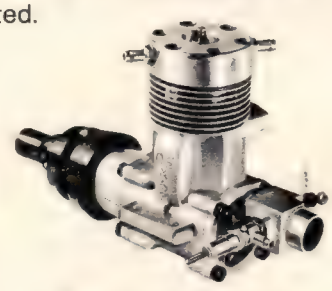
.30 RC WANKEL

This ball bearing R/C engine comes complete with muffler. It is extremely quiet, smooth, and powerful. Equivalent to most .40 size conventional engines.



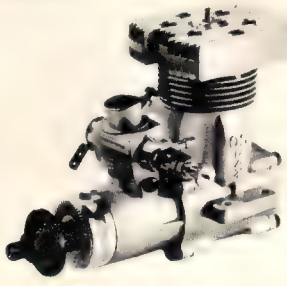
.65 RSR MARINE

This rear rotor Schneurle ported engine has ball bearings and it is ringed. It comes with flywheel but without muffler. This is a non-R/C engine for racing.



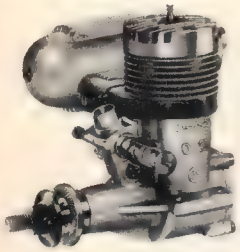
.40, .45, .60 RSR RC MARINE

These 3 rear rotor Schneurle ported R/C marine engines have ball bearings and come complete with flywheel as shown. Muffler is not included.



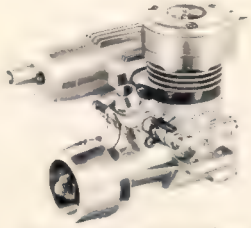
.45 FSR-H RC

This front rotor Schneurle ported R/C engine has ball bearings and comes with finned heat sink head and no muffler. It is designed for helicopters.



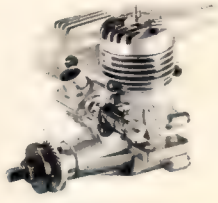
.15, .20, .25 .30, & .35 RC

These 5 R/C engines all come complete with a muffler. High quality regular R/C engines.



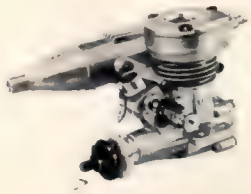
.20 & .30 RC MARINE

Both of these R/C marine engines come complete with muffler and water jacket head. Flywheel is not included.



.10 FSR RC

This front rotor R/C engine is Schneurle ported and comes complete with muffler. Very powerful and light weight.



.10 FSR RC MARINE

Same engine as to the left except that it is a marine version with a water jacket head. Flywheel is not included.



GLO PLUGS

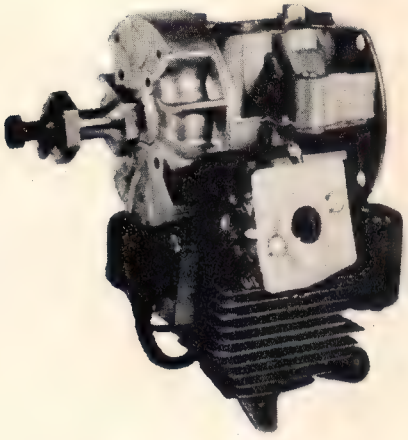
Special plugs for Wankel (left), and .60 4 cycle (right).

NOTE: Replacement O.S. Max mufflers are on Page 222 of this catalog.

OSM01015	OS MAX .15 RC W/MUFFLER	35.95	28.75
OSM01020	OS MAX .20 RC W/MUFFLER	37.95	30.35
OSM01025	OS MAX .25 RC ENGINE W/MUFFLER	39.95	31.95
OSM01030	OS MAX .30 RC ENGINE W/MUFFLER	45.95	36.75
OSM01035	OS MAX .35 RC ENGINE W/MUFFLER	47.95	38.35
OSM01140	OS MAX .40 RC ENGINE W/MUFFLER	69.95	55.95
OSM01160	OS MAX H60F RC BLCKHEAD W/MUFF	94.95	75.95
OSM01210	OS MAX .10 FSR RC W/MUFFLER	28.95	23.15
OSM01225	OS MAX .25 FSR RC W/MUFFLER	56.95	45.55
OSM01240	OS MAX .40 FSR RC W/MUFFLER	84.95	67.95
OSM01245	OS MAX .45 FSR-H RC	89.95	71.95
OSM02421	OS MAX .21 FSR RC CAR	59.95	47.95
OSM02510	OS MAX .10 FSR RC MARINE W/MUF	35.95	28.75
OSM02521	OS MAX .21 FSR RC MARINE	64.95	51.95
OSM02620	OS MAX .20 RC MARINE W/O FLYWL	47.95	38.35
OSM02630	OS MAX .30 RC MARINE W/O FLYWL	51.95	41.55
OSM02640	OS MAX .40 RSR RC MARINE W/FWL	94.95	75.95
OSM02645	OS MAX .45 RSR RC MARINE W/FWL	104.95	83.95
OSM02660	OS MAX .60 RSR RC MARINE W/FWL	136.95	109.55
OSM02665	OS MAX .65 RSR MARINE W/FLYWHL	136.95	109.55
OSM03180	OS MAX .80 RC RV ENGINE W/MUFF	136.95	109.55
OSM04130	OS MAX .30 RC WANKEL W/MUFFLER	104.95	89.95
OSM05145	OS MAX .45 FSR RC W/MUFFLER	89.95	71.95
OSM05160	OS MAX .60 FSR RC W/ MUFFLER	114.95	91.95
OSM05260	OS MAX .60 FSR RC PRESS. W/MUF	144.95	115.95
OSM05360	OS MAX .60 4 CYCLE RC ENGINE	199.95	149.95
OSM15030	OS MAX GLO PLUG FOR WANKEL	1.45	1.55
OSM15060	OS MAX GLO PLUG FOR 60 4 CYCLE	1.95	1.85

QUADRA

Quadra IGNITION ENGINE



THIS IS IT!

The remarkable engine you've been reading about in all the Model magazines!

- Two actual horsepower, two cu. in., the most suitable engine for large models with its scale-like sound, realistic performance and operating costs of around 20 cents an hour with a fuel mixture of 20-1 gas and oil.
- No greasy mess or fuel soaking, and any finish or covering can be used (no need for hot fuel proof dopes).
- Props in 16", 17", 18" and 20" now readily available from several manufacturers.
- Engine has a chrome liner, roller bearing crankshaft and rod and a life expectancy of better than 200 hours with proper use. Drive adaptors are available for rear drive using standard props.
- Comes with muffler, mount, Tillitson pump/carb, prop adaptor spool, washer and prop bolt.

AIRCRAFT VERSION

- Starts and runs in any position. Electric starter not required but some being marketed especially for this engine (some with radio controlled operation).
- Useful RPM range of 7,000 to 12,000, develops 2 actual dyno tested HP at 10,000 RPM, torque curve nearly flat between 8,000 and 10,000 RPM.
- Crankcase already tapped for pressure take-off for smoke tank (the hot exhaust readily produces smoke from diesel fuel, etc.)

QUA01200	QUADRA 2 CU IN AIRCRAFT ENGINE	139.95	109.95

ROSSI

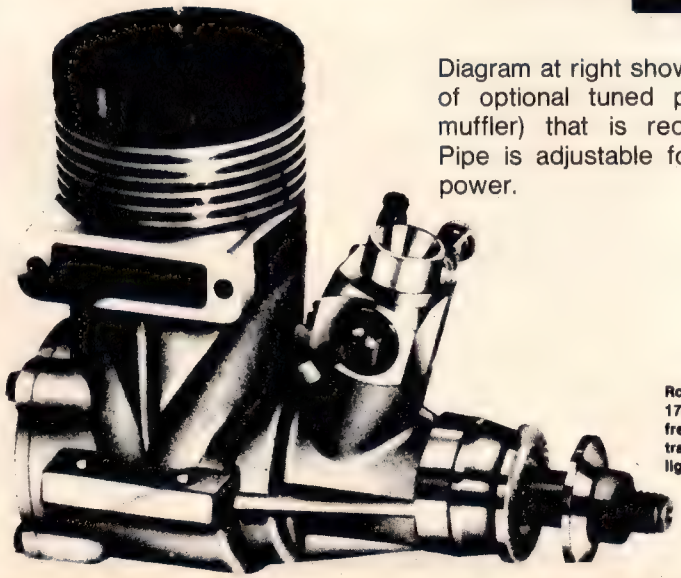
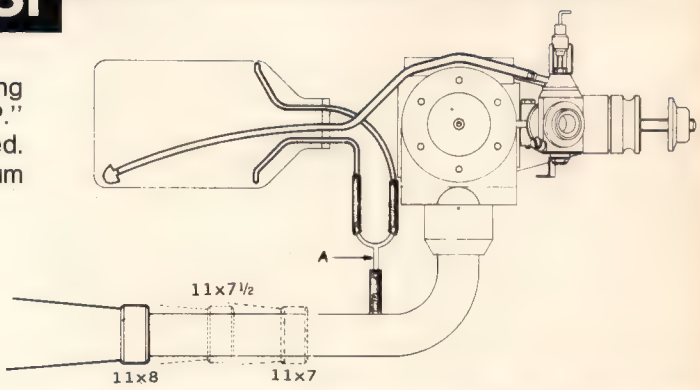


Diagram at right shows mounting of optional tuned pipe ("T.P." muffler) that is recommended. Pipe is adjustable for maximum power.



Rossi's world famous precision craftsmanship has produced a Schneurle 60 R/C with a rugged crankcase, massive 17mm crankshaft and optimum quality bearings fitted to exacting tolerances for a dependable, long life, maintenance free operation. For easy starting, easy handling, the superb automix carburetor gives a clean low idle and a smooth transition thru the mid-range to an effortless two horse power top end. The RPM increasing "T.P." muffler is the lighest, quietest available today. Rossi 60 R/C - the precise perfection of power and performance.

ROS05160	ROSSI .60 RC ENGINE	136.95	109.95
ROS16060	ROSSI TUNED PIPE(SIDE EXH. 60)	29.95	26.95

J. J. SCOZZI

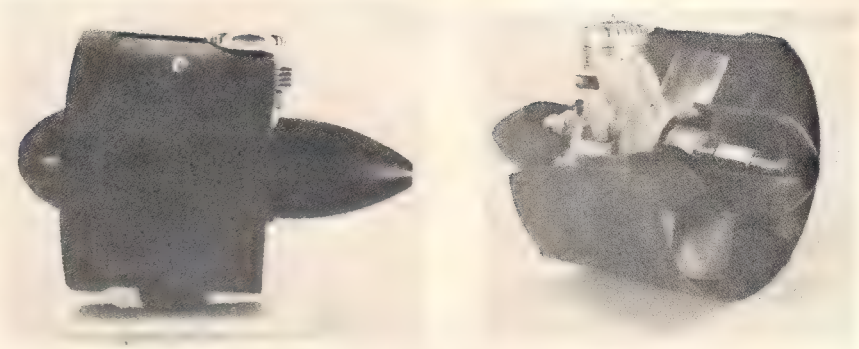
PRESENTING

THE FAN JET POWER FAMILY

TURB-AX I

SPECIFICATIONS

Length	9 in.
Diameter	5¼ in. (Shroud)
Fan Diameter	4.75 in.
Thrust	To 7½ lbs.
Engine	.40 (not incl.)



TURB-AX II

SPECIFICATIONS

Length	8 in.
Diameter	4¼ in.
Fan Diameter	3.90 in.
Thrust	To 4 lbs.
Engine	.21 (not incl.)



DUCTED FAN BASICS

Since the inception of the Scozzi Ducted Fan some years back, the popularity of ducted fans has grown tremendously. Although there are an amazing number of modelers who are well versed in ducted fan technology, we continue to find that certain questions repeat themselves in our daily mail. We hope you will find your questions answered below. We would also like to refer you to our articles in **RC Modeler**, June and August of 1976.

ENGINES

- **What engines do you recommend for use with Turb-Ax I?**
  We recommend the new form rotor ABC engines such as the K & B 6.5 front rotor.
- **What technique is used for throttling?**
  Through use of a front rotor engine, conventional throttling techniques are used. We recommend a Perry fuel pump and carburetor for maximum performance.
- **What other engines can be used?**
  The racing rear rotor .40's provide the necessary power for use with this unit, however, throttling becomes a complex, highly critical operation. A modeler may wish to use these engines without throttle.
- **What effect will the use of a tuned pipe have?**
  When properly installed, a tuned pipe will add approximately a 20% power increase as well as a significant noise reduction.
- **Why not a .60 engine?**
  A ducted fan needs high horsepower and high RPM for optimized performance. If a .60 engine were used the fan diameter would have to be larger to compensate for the slower rotative speeds which scaling ability. Increased engine weight is also a consideration.
- **What fuel do you recommend?**
  Horsepower is proportional to the amount of nitro in the fuel, but there is a penalty in engine wear. We recommend a 30 to 40% nitro fuel.
- **What engines do you recommend for the Turb-Ax II?**
  A good .21 engine such as the K&B 3.5 cc.

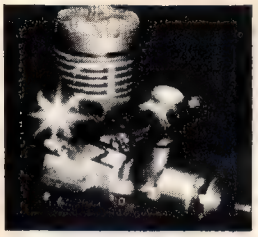
PLANES

- **Can I build a scale plane?**
  Yes, but all jet models cannot be scaled 1 to 1 from the original. Compensations must be made in wing areas, inlet air, and exit air.
- **Will the Scozzi fan work internally mounted?**
  If guidelines are followed for clean inlet and exhaust air routes, internal installation is not only achievable, but is recommended.
- **What is the maximum weight one should fly with Turb-Ax I and Turb-Ax II?**
  The recommended maximum weight for Turb-Ax I is 9½ lbs., and Turb-Ax II 4 lbs.
- **How do the flight and sound characteristics differ from a prop model?**
  The sound is that of a high pitch whine, such as in a real jet. The flight characteristics differ in that the take-off is longer and there is less prop effects.

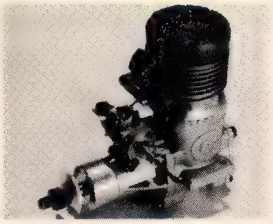
In view of the fact that this is a new phase of the hobby industry, we would like to caution the modeler to proceed with maximum care when constructing, installing, and running a ducted fan. Factors such as high engine power and prop suction warrant that all modelers take safety precautions beyond those normally used. A detailed procedural safety list is included with every Scozzi unit.

SC017100	SCOZZI DUCTED FAN TURB AX-1	59.95	49.95
SC017200	SCOZZI DUCTED FAN TUB-AX II	39.95	33.50

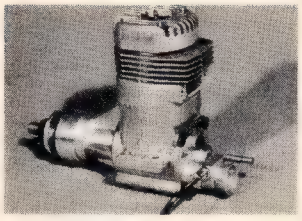
SUPERTIGRE



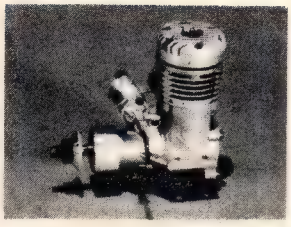
G 21/46 RC



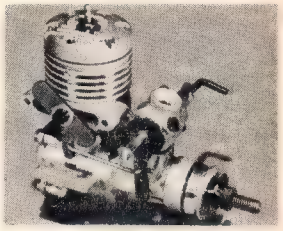
SUPERTIGRE G60 BLUE HEAD



ST X-40 SCHNUERLE



ST 35 R/C

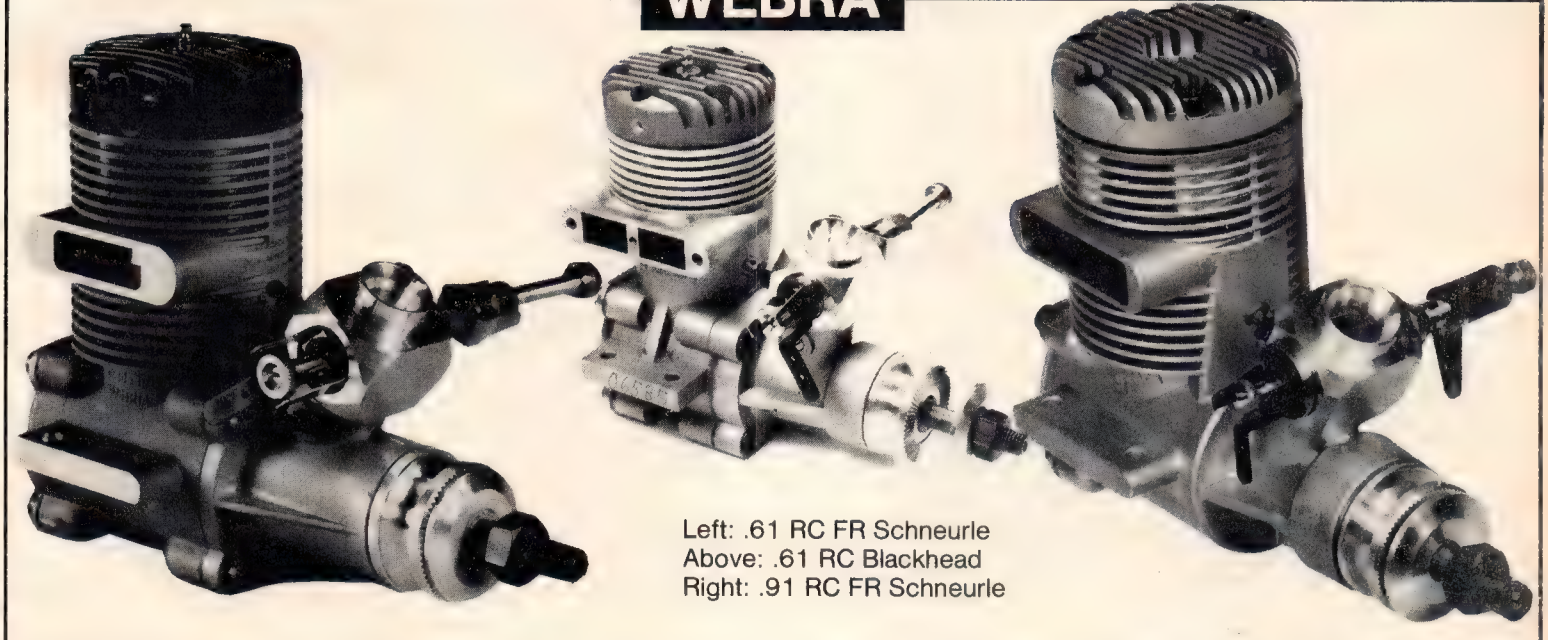


ST 23 R/C

Supertigre engines are made in Italy and imported into this country by World Engines. They are always in short supply and seldom are more than a few sizes available at any one time — stock-outs of 6 months are not unusual — so call before ordering to check availability. All Supertigre engines feature ball bearings except the .35 RC, and none of them come with muffler (see page 222). The "X" engines are Schneurle ported ABC engines for high rpm lean runs. The G.60 ABC's have Perry Porting.

STG00142	SUPERTIGRE X 40 SPEED ENGINE	76.95	61.55
STG01023	SUPERTIGRE G 20/23 RC	49.95	39.95
STG01035	SUPERTIGRE .35 RC ENGINE	44.95	35.95
STG01060	SUPERTIGRE ST .60 RC BB ENGINE	64.95	51.95
STG01146	SUPERTIGRE G 21/46 RC ENGINE	55.95	44.75
STG01160	SUPERTIGRE G .60 RC BLUEHEAD	84.95	67.95
STG01171	SUPERTIGRE G .71 RC	99.00	79.20
STG01260	SUPERTIGRE G .60 FI ABC RC	92.95	74.35
STG01360	SUPERTIGRE G .60 ABC RC W/PUMP	112.95	89.95
STG05046	SUPERTIGRE X .46 RC SCHNEURLE	Price unavailable at press time	
STG05060	SUPERTIGRE X .60 RC SCHNEURLE	125.00	99.95
STG05160	SUPERTIGRE X .60 RC FE SCHNRLE	125.00	99.95

WEBRA



Left: .61 RC FR Schneurle
Above: .61 RC Blackhead
Right: .91 RC FR Schneurle

Over the past few years, Webra has become known as the standard in power, performance, and reliability. There are two categories of Webras: Blackheads and Schneurles.

The Blackheads (.40, .40 marine, and .61) offer good strong power while remaining very untempermental. Until Schneurle porting was available these were absolutely the hottest engines on the market. The Blackheads feature excellent characteristics such as easy starting and relatively low fuel consumption. These are conventionally ported engines with ball bearings and the famous Webra Carburetor.

The Schneurles are second generation design engines that feature Schneurle porting for higher performance. They are available in several sizes, both in regular and marine configurations. These engines are more powerful than the Blackheads and they also exhibit the same excellent characteristics of reliable idle, smooth transition performance, easy starting, and untempermental adjustments. Fuel consumption is higher, however. These engines have a habit of finding their way to the winners circle in many contests because of their performance.

All Webra engines listed below are R/C, have ball bearings, and come with the famous Webra carburetor. All marine engines come with flywheel and water jacket head. None come with muffler (see page 225).

WEB01140	WEBRA #1022RC .40 RC BLACKHEAD	122.40	79.55
WEB01161	WEBRA #1020RC .61 RC BLACKHEAD	164.80	98.90
WEB05110	WEBRA #1008RC .10 RC FR SCHNRL	91.15	59.25
WEB05120	WEBRA #1019RC .20 RC FR SCHNRL	99.10	64.40
WEB05140	WEBRA #1034RC .40 RC FR SCHNRL	142.10	92.35
WEB05161	WEBRA #1024RC .61 RC FR SCHNRL	195.65	117.40
WEB05191	WEBRA #1037RC .91 RC FR SCHNRL	230.60	138.35
WEB06161	WEBRA #1026RC .61 RC RV SCHNRL	221.90	133.15
WEB09040	WEBRA #1035RCW .40 RC MARINE	169.75	101.85
WEB09061	WEBRA #1026WR 61 RV SCH MARINE	245.00	146.95
WEB09091	WEBRA #1039RCW .91 SCHL MARINE	269.45	161.65

Accessories

We have listed as "Accessories" all of the various little items (and some large items) that you will need in completing your model. These items include the clevises, pushrods, cables, collars, grommets, etc., etc., and so on. In order for you to get an idea of what is available, you should peruse this section with great care. Learn the different products you know you'll be needing, and know the manufacturers of those products.

Within this section, the choice of pushrods is the most puzzling subject, and we get a lot of calls on what should be used. The simplest answer is: "Whatever you'd like." This, though is hardly a fitting answer, especially if you know next to nothing about what they are used for, let alone what they actually are.

Sullivan and Su-pr-line make nylon pushrods that can be used for any purpose in a model. These are both flexible, yet they can withstand the loads imposed upon them by the larger designs. They are called Gold-n-rods and Nyrods, respectively.

Dubro makes a wire pushrod that is held within a nylon tube. This offers the superior strength of steel, while giving up a little of the flexibility of the nylon pushrod. There is no weight penalty. As with the nylon pushrods, these "Kwik-Rods" need to be supported at three or four places along their length so that they can withstand compression loads.

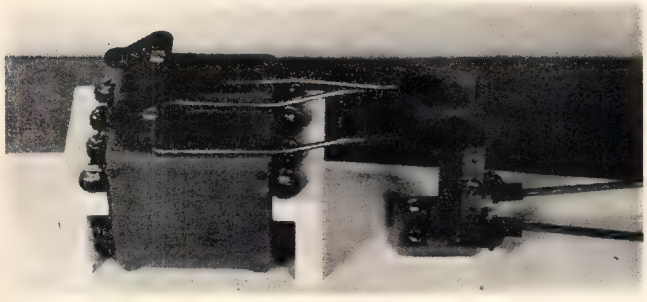
Flex cables are similar to the nylon or steel pushrods, but they are much more flexible to allow them to snake around various obstacles, such as fuel tanks, bulkheads, and servos, to name a few. While commonly used for throttle actuation, they can also be used for nosegear steering control, control surfaces, and any other uses you can think of. Cables are made by Dubro and Su-Pr-Line.

We also carry pre-made aluminum landing gears. These replace the ones found on planes such as the Ugly Stick and Bridi Trainer series, to name a few. They are made by Hallco and Bridi. To go with these, use the Banner axles . . . they make wheel installation so easy!

A line new to Tower Hobbies is the Proctor line of scale fittings for those antique airplanes that had flying wires to support their wings, tails, and other stuff. You'll find scale turnbuckles, anchors, and pulleys. If you've wanted a really *complete* scale model of that antique or WW I plane, then these items are just the ticket. With these, you can actually make the control hook-ups that work just like the real thing . . . cables and all!

Just a few more notes on new stuff that we've added since the last catalog: Check out the new hinge slotters brought out by both Dubro and Goldberg. While different, they make the job of cutting hinge slots so much easier, that you'll wonder how you made do without them in the past. Also the ball-links by Dubro add a new dimension to control hook-ups . . . you no longer have to make sure that the pushrod comes in at exactly the right angle to insure freedom of movement in the controls.

AIRTRONICS



VECTOR DIRECTOR — MARK II

A mechanical linkage to integrate elevator and rudder servos for elevons and flaperons control surfaces.

- Adjustable sensitivity-adjust proportion of rudder to elevator control.
- Precision injection molded from glass filled nylon for smooth control and high strength — gold colored.
- Minimum size for compact installation — less than one square inch of floor space — fits narrow sailplane fuselages.
- Complete hardware — mini-snaps, retainers, control rods and mounting screws.

Quick disconnect from servos — no need to re-adjust if you remove radio gear. Universal use with any radio system — bricks or separate servos. For V-tail or flying R/C sailplane or power planes.

AIR20520	AIRTRONICS 9520 VECTOR DIRECTR	3.95	3.60

BANNER



OIL TEMPERED SPRING STEEL
AXLE SHAFTS

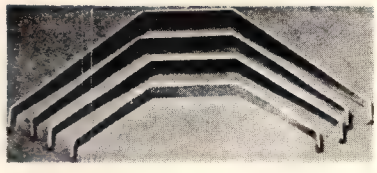


WORKS GREAT ON GEAR LIKE BRIDI AND HALLCO!

FOR SHEET METAL LANDING GEAR IN 3 SIZES — 3/32, 1/8, & 5/32

BAN26180	BANNER AXLE SHAFTS 1/8 IN (2)	1.40	1.35
BAN26332	BANNER AXLE SHAFTS 3/32 IN (2)	1.30	1.25
BAN26532	BANNER AXLE SHAFTS 5/32 IN (2)	1.50	1.45

BRIDI



Hardened Dural Landing Gear
L-1 FOR .19 SIZE PLANES
L-2 FOR .19-.40 SIZE PLANES
L-3 FOR .40-.60 SIZE PLANES
L-4 FOR .60 SIZE OR FLOATS

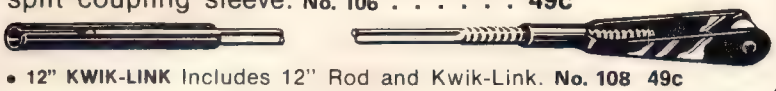


BRI26001	B&E L-1 LANDING GEAR SMALL 9IN	2.75	2.60
BRI26002	B&E L-2 LANDING GEAR MED. 11IN	2.95	2.75
BRI26003	B&E L-3 LANDING GEAR LGE. 12IN	3.25	3.00
BRI26004	B&E L-4 LANDING GEAR X-LG 14IN	3.55	3.30

KWIK-LINKS

THE ORIGINAL DU-BRO KWIK-LINK®

Control yoke assembly for any control linkage. Allows easy removal for on-the-field adjustments. 4" rod and split coupling sleeve. **No. 106 . . . . . 49c**



• **12" KWIK-LINK** Includes 12" Rod and Kwik-Link. **No. 108 49c**

NYLON KWIK-LINK®

These "Sure-Lock" Kwik-Links are the same size as our steel Kwik-Links and are made for self-threading **No. 122**



2 for 39c

No. 123 12" rod with nylon Kwik-Link **29c Each**

DU-BRO KWIK-LINK®

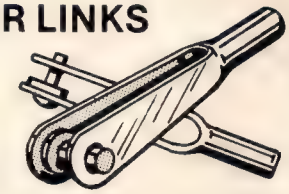


The tried and true spring steel Kwik-Link. Ideal for any control linkage. 2 each.

No. 109 . . . . 75c

NICKEL PLATED SOLDER LINKS

MAKES A STRONG, ATTRACTIVE AND EASY TO SOLDER CONNECTOR FOR SERVO OR HORN. NICKEL PLATED FOR A BRIGHT AND SHINY FINISH — A NICE IMPROVEMENT OVER TIN PLATING WHICH WILL EVENTUALLY OXIDIZE AND CORRODE. PACKAGE INCLUDES 2 SOLDER LINKS AND 2 LINK GUARDS.



No. 112 (2 ea.) **69c**

MINI-KWIK-LINKS

These "SURE-LOCK" mini-links are perfect for ½ A airplanes or any throttle hook-up, self-threading nylon. **NO. 228**

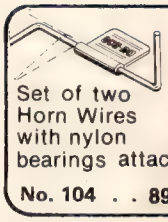


2 FOR 39¢

DU-BRO

CONTROL HOOK-UP ACCESSORIES

AILERON HORN WIRES



Ideal for Strip Ailerons. Hi, mid or low wing planes.

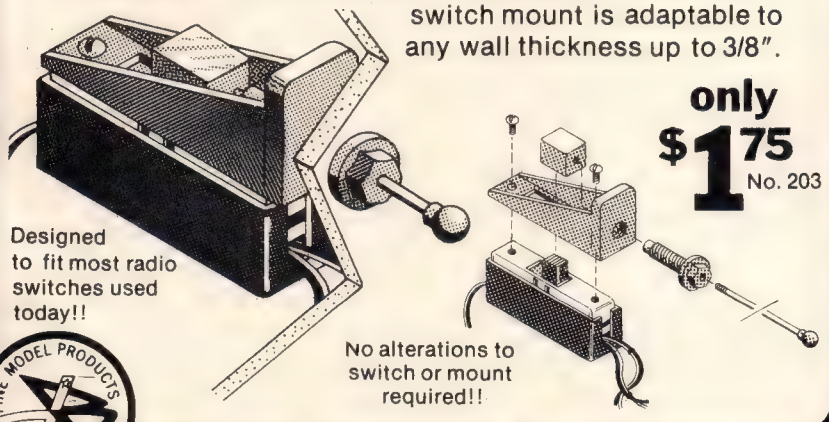
Set of two Horn Wires with nylon bearings attached.

No. 104 . . 89c

New! DU-BRO KWIK-SWITCH MOUNT

THE SIMPLEST, FASTEST AND EASIEST WAY TO MOUNT YOUR BATTERY SWITCH!

This complete switch mounting set enables you to install your battery switch in minutes, anywhere in the fuselage, by drilling ONE, 3/16" hole!!! Excellent for use in planes, helicopters, boats, and cars. This attractive, black nylon switch mount is adaptable to any wall thickness up to 3/8".



only $1.75 No. 203

Designed to fit most radio switches used today!!

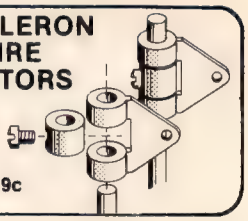
No alterations to switch or mount required!!

FINE MODEL PRODUCTS BY DU-BRO

DU-BRO PRODUCTS INCORPORATED

STRIP AILERON HORN WIRE CONNECTORS

Simplify your servo linkage hook-ups.



No. 103 79c

STRIP AILERON LINKAGE HOOK-UP

Complete fully adjustable 22-pc. set.



Can be used on any high, mid or low wing plane.

No. 101 $2.95

NYLON BEARINGS

Ideal for elevator and aileron linkage.

For 3/32 Horn wire. 4 each



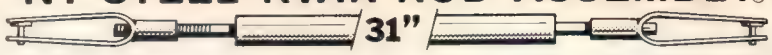
75c **No. 124**

PRICES SHOWN ARE RETAILS. SEE PAGE 165 FOR TOWER PRICES AND STOCK NUMBERS.

DU-BRO

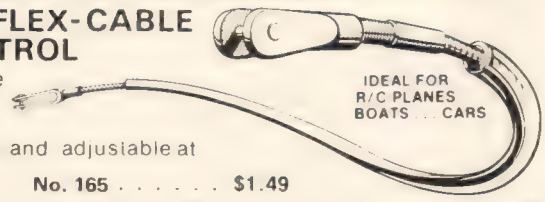
CONTROL HOOK-UP ACCESSORIES

NY-STEEL KWIK-ROD ASSEMBLY®



No shrink - no stretch, free running fully adjustable at control horn. Strong, simple and easy to install. Hot, wet or cold days won't affect trim setting. Complete 31" assembly with Kwik-Links. No. 102 . . . . . $1.49

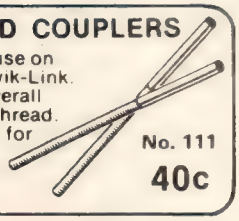
DU-BRO 20" FLEX-CABLE MOTOR CONTROL



Provides the ultimate in control cable assembly. Highly flexible, free running and adjustable at control horn.

No. 165 . . . . . $1.49

THREADED COUPLERS



Designed for use on the Du-Bro Kwik-Link. Brass, 1¼" overall with ¾" 2-56 thread. 1/16" opening for piano wire or cable. 2 each.

No. 111
40c

SPLIT COUPLING SLEEVES



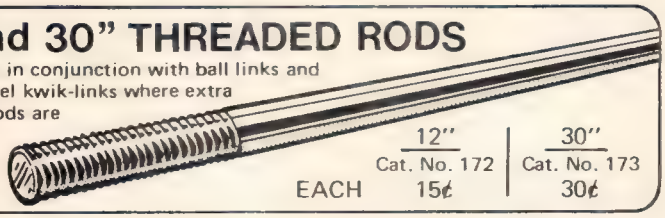
4 each.

Pre-tinned for easy soldering. Designed for use with the Du-Bro Kwik-Link. Will fit .062 to .078 wire.

No. 110
30c

12" and 30" THREADED RODS

Can be used in conjunction with ball links and nylon or steel kwik-links where extra long push rods are needed. Bendable and strong



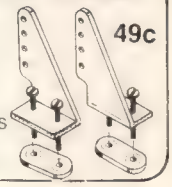
	12"	30"
	Cat. No. 172	Cat. No. 173
EACH	15¢	30¢

LARGE THREADED COUPLERS Cat. No. 212



These new threaded couplers are now designed to fit perfectly on Kwik-Link rods and flex cable. 5 for only $1.20

NYLON CONTROL HORNS

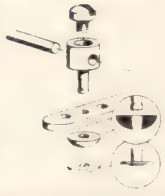


Four throw adjustment positions. Set contains one left and one right horn, two self-threading nut plates and four screws.

49c

No. 105

NEW E-Z CONNECTORS



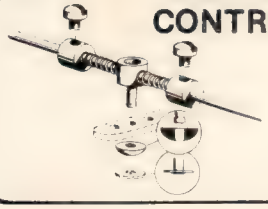
Still only 98c Pr.

WE HAVE INCLUDED IN EVERY PACKAGE OF E-Z CONNECTORS 2 OF OUR NEW NYLON SNAP-ONS. ESPECIALLY MADE TO HOLD TIGHT ON ANY SIZE CONTROL ARM. THESE NEW SNAP-ONS CAN SAFELY BE USED OVER AND OVER AGAIN. FOR THOSE OF YOU WHO STILL PREFER A PERMANENT INSTALLATION, JUST PEEN ON THE WASHER AS BEFORE. YOUR CHOICE.

Cat. No. 121

SNAP ON -Or- PEEN ON

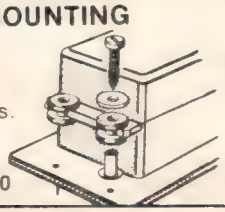
CONTROL OVER-RIDE SERVO SAVER



This adjustable, spring action assembly protects your servo from shock and stalling. Excellent for throttle or rudder nosewheel hookups. Both light and heavy duty springs are included for any linkage application.

No. 120 . . . . . 98c

SMALL SERVO MOUNTING HARDWARE



60 pieces, enough for five servos.
20 - Sheet Metal Screws.
20 - Fibre Washers
20 - Spacers.

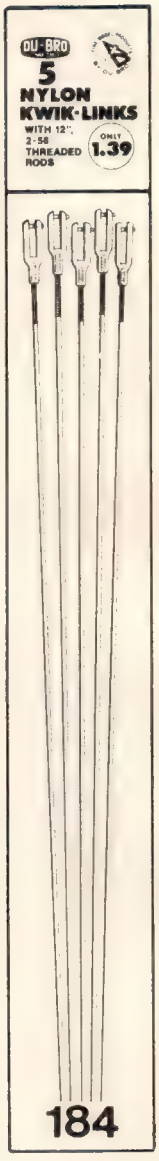
No. 114 . . . . . $1.20

SMALL SERVO NATURAL RUBBER GROMMETS



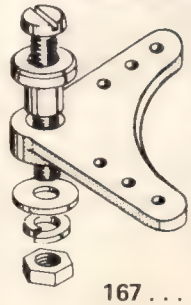
20 pieces.

No. 115
80c





NYLON BELLCRANK ASSEMBLY



90° Nylon Bellcrank with Brass Bushing, 4-40x¾" Bolt, Washer, Lock Washer and Nut. 2 each per Set. INSIST ON THE FINEST!

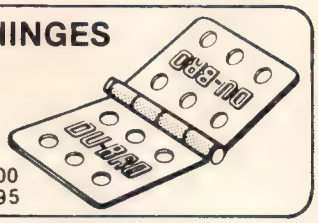
167 . . . . . 75¢

DU-BRO

ENGINE, WING & LANDING GEAR FITTINGS

DU-BRO NYLON HINGES

Easy installation. Embossed letters and holes make a better gluing surface. 5/8" x 1-1/8" open. Hinge pin locked in place.

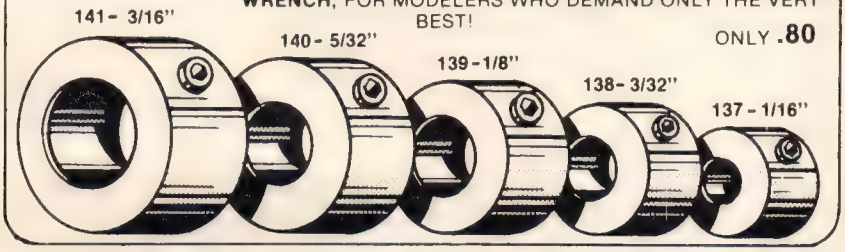


No. 116 (6 each) $1.10
No. 117 (15 each) $2.49
(MINI SIZE)
No. 118 $1.00
No. 119 $1.95

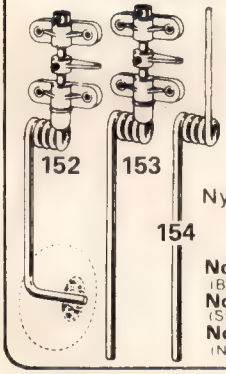
DU-BRO PLATED BRASS DURA COLLARS

ENOUGH STOCK SO THAT THREADS WILL NOT STRIP. CAN BE RE-WORKED FOR OTHER USES — NOT LIKE HARDENED STEEL. A NICE IMPROVEMENT THAT HAS ALWAYS BEEN THERE. STILL AVAILABLE IN SETS OF 4, **COMPLETE WITH ALLEN WRENCH**, FOR MODELERS WHO DEMAND ONLY THE VERY BEST!

ONLY **.80**



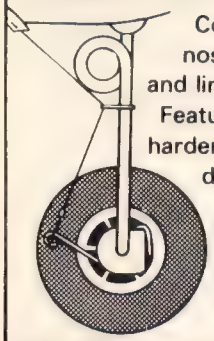
STEERABLE NOSE GEAR



Quality, shock absorbing nose gear. 5/32" heavy duty wire. Complete with Nylon Nose Gear Blocks and Steering Arm.

No. 152 $2.95 Each (Bent)
No. 153 $2.95 Each (Straight)
No. 154 $ .75 Each (Nose Gear Wire)

FRICTION BRAKE

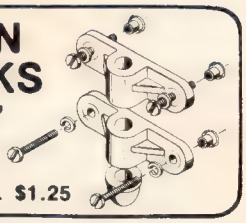


Complete 10 pc. nose wheel brake and linkage hook-up. Features NEW case hardened steel brake drum and other fine quality parts. Requires very little pressure to engage.

NO.157. . . . . $2.95 (Wheel not included)

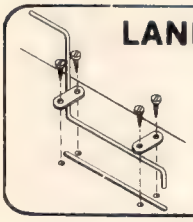
NYLON BLOCKS

For 5/32" wire.



No. 156 . . . $1.25

LANDING GEAR STRAPS

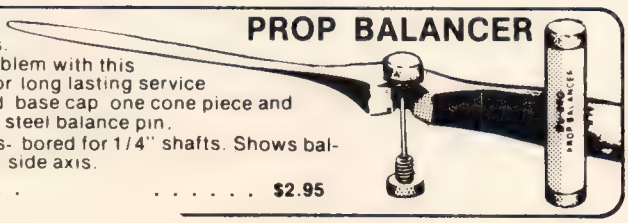


Made of steel - light and strong. Includes 4 Straps and 8 Screws.

No. 158 . .40c

PROP BALANCER

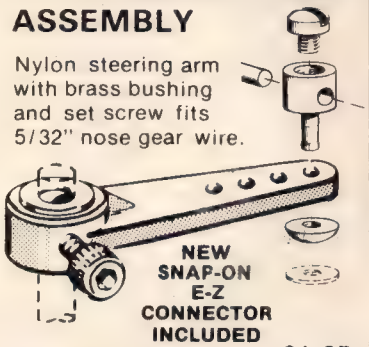
Rough props ruin planes and radios. Eliminate the problem with this fine tool. Made for long lasting service featuring Knurled base cap one cone piece and precision ground steel balance pin. Fits all prop sizes- bored for 1/4" shafts. Shows balance on long and side axis.



No. 160 . . . . **$2.95**

1¼" STEERING ARM ASSEMBLY

Nylon steering arm with brass bushing and set screw fits 5/32" nose gear wire.



No. 155 . . . . . $1.25

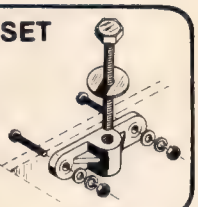
1-1/4" STEERING ARM



Fits 5/32" wire. Consists of 1 Nylon Steering Arm with Brass Bushing and 1 Cap Screw. **No. 166 . 75c**

WING BOLT SET

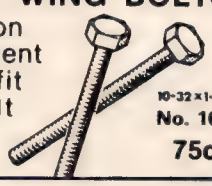
The up-to-date way to fasten wings to fuselage. Includes Nylon Bolts and Nylon Threaded Blocks - 22 piece set.



No. 159 . .$1.25

NYLON WING BOLTS

Four nylon replacement bolts to fit Wing Bolt Set.



No. 164
75c

FOAM TAPE



Quality Foam Tape - super sticky on one side - cuts down vibration. Ideal for wing saddles. 3 ft.

No. 163 . . . . 75c

TANK FILTER



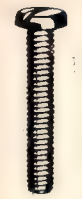
Combination weight and filter. Designed to fit all clunk tanks. Made of sintered bronze to give the ultimate in filtering.

No. 161 . . . $1.15

PRICES SHOWN ARE RETAILS. SEE PAGE 165 FOR TOWER PRICES AND STOCK NUMBERS.

DU-BRO

MOUNTING BOLTS AND BLIND NUT SETS



For mounting engines - large or small. Includes 4 each of Bolts, Flat Washers, Lock Washers and Blind Nuts. 16 pcs.

No. 125 ..... **50c**
2-56 x 1/2"



No. 126 ..... **50c**
3-48 x 3/4"

No. 127 ..... **55c**
4-40 x 1-1/4"

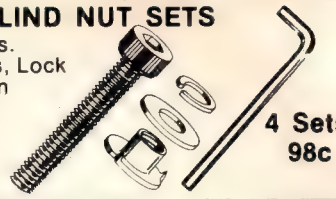


No. 128 ..... **55c**
6-32 x 1-1/4"

SOCKET HEAD BOLT AND BLIND NUT SETS

For those who prefer socket head bolts. Includes 4 each of Bolts, Flat Washers, Lock Washers and Blind Nuts plus one Allen Wrench. 17 piece set. Two sizes. High strength steel.

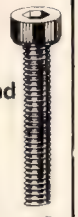
No. 129 4-40 x 1" . . **$1.10 Set**
No. 130 6-32 x 1" . . **$1.10 Set**



4 Sets 98c

AIRCRAFT QUALITY BOLT SETS





Includes 4 each of Bolts, Flat Washers and Lock Nuts. 12 pcs. High Strength Steel.

174..... 2-56x½...50¢
175..... 3-48x¾...50¢
176..... 4-40x1¼ 55¢
177..... 6-32x1¼ 55¢





Socket Head Bolts
178..... 4-40x1.. $1.10
179..... 6-32x1.. $1.10

SOCKET HEAD BOLT BALL WRENCH SET





Fits 440 and 632 head bolts. High quality, alloy steel Heat treated for maximum torque. Close tolerances. Leads into any cap screw head from any angle. 4-3/4" blade ideal for reaching into those tight spots. Set of two.

No. 132 . . . . . **$4.25**

BLIND NUTS



Can be used on 1/8" plywood (or thicker) without sticking thru. 4 Thread sizes. 4 per set.

No. 133 2-56 . .35c
No. 134 3-48 . .35c
No. 135 4-40 . .35c
No. 136 6-32 . .40c

LOCK NUTS



Aircraft Quality Nylon Insert LOCK NUTS.

168 2-56
169 3-48
170 4-40
171 6-32

12 per set . . . **$1.10**

ALLEN WRENCHES

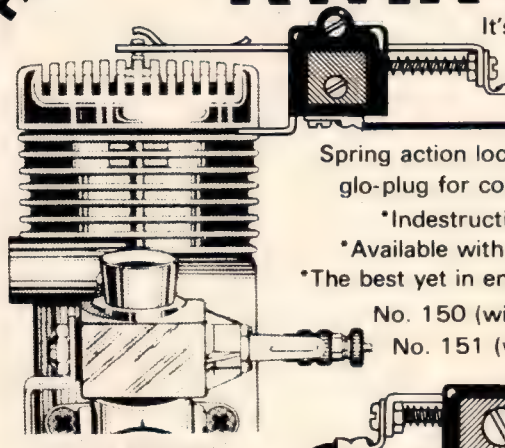
Two 6" wrenches to fit both socket head bolt sizes. 4-40 and 6-32.

No. 131



2 for $1.10

FANTASTIC NEW SPRING ACTION KWIK-KLIPS



It's finally here!!! A battery clip that won't ever slip or vibrate off!

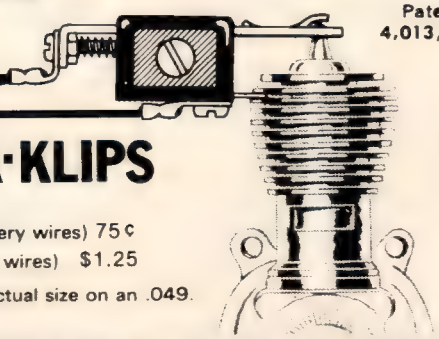
Spring action locks the Kwik-Klip onto the glo-plug for continuous positive contact.

*Indestructible steel and nylon parts.
*Available with or without battery wires.
*The best yet in engine starting accessories.

No. 150 (without battery wires) 85¢
No. 151 (with battery wires) $1.40

Patent 4,013,336

"QUICK ASSEMBLY"



1/2 A KWIK-KLIPS

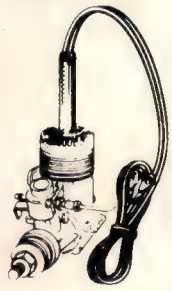
For engines .020 to .074.

No. 148 (without battery wires) 75¢
No. 149 (with battery wires) $1.25

Shown actual size on an .049.

DU-BRO KWIK-GLO GLO-PLUG CONNECTOR

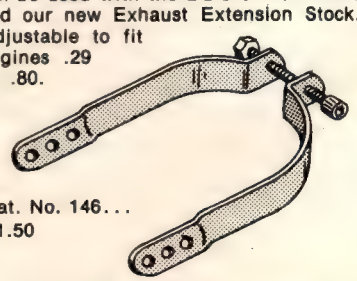
For engines .10 & up. One piece brass barrel snaps on to plug for positive starting. 24 - 1/2" long with attached battery lugs. An excellent accessory for today's kind of modeler.



No. 147 . . . . . **$2.25**

STEEL MUFFLER STRAPS

These steel, never break, muffler straps can be used with the Du-bro Muff-l-aire and our new Exhaust Extension Stock. Adjustable to fit engines .29 to .80.



Cat. No. 146...
$1.50

DU-BRO PRODUCTS INCORPORATED

PRICES SHOWN ARE RETAILS. SEE PAGE 165 FOR TOWER PRICES AND STOCK NUMBERS.

DU-BRO "SNAP-ON" BALL LINKS

DU-BRO

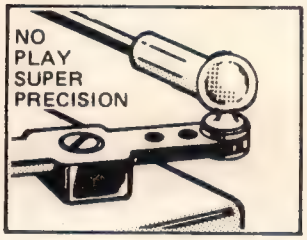


(2-56 THREADED COUPLER INCL

BOLT-ON LINK

This 3-piece ball link set (No. 180) is a must for all helicopters and is readily adaptable for many linkage hook-ups on R/C planes, boats or cars. Ball joint action eliminates binding and is neat and clean in appearance. Only **85¢**

- THREADED FOR 4-40 ROD OR BOLT
- TOUGH NYLON LINK SNAPS-ON AND HOLDS TIGHT



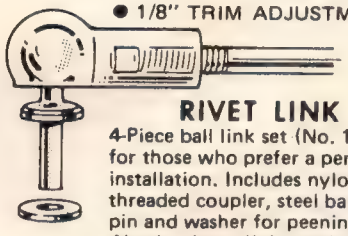


THREADED LINK

5-Piece ball link set (No. 181) is excellent for off-set steering, throttle and servo hookups. Includes steel ball assembly with 2-56 thread, washer, nut, threaded coupler and nylon ball link. Easily adjustable. Only **85¢**



- AIRCRAFT QUALITY HIGH STRENGTH STEEL
- 1/8" TRIM ADJUSTMENT



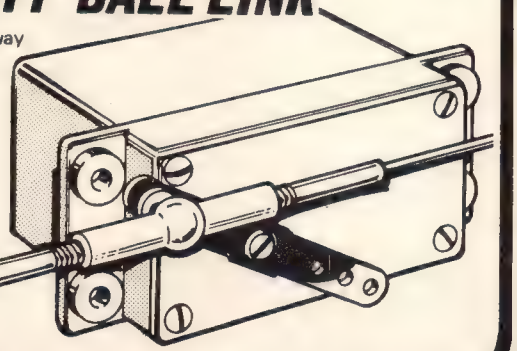
RIVET LINK

4-Piece ball link set (No. 182) for those who prefer a permanent installation. Includes nylon link, threaded coupler, steel ball with pin and washer for peening on. Absolutely no linkage play when ball links are used. Nylon link helps reduce vibration and looks good too! Only **85¢**



AILERON CONNECTOR & DUAL TAKE-OFF BALL LINK

5-Piece set (No. 183) includes 2-way nylon link, 2 threaded couplers, 1 steel ball with pin and washer for peening assembly securely onto servo arm. For fast equal trim adjustments just "snap-off" nylon link, twist in desired direction and "snap" back on. EASY! Also great for rudder-nosewheel and elevator-brake hook-ups. Only **$1.00**

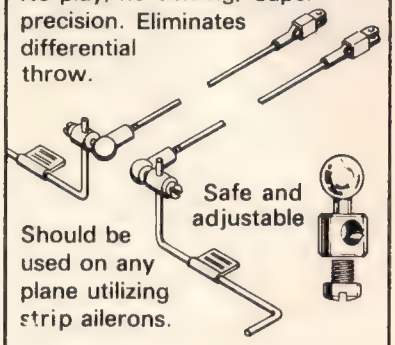


FINE MODEL PRODUCTS BY DU-BRO

DU-BRO PRODUCTS INCORPORATED

STRIP AILERON BALL LINK LINKAGE HOOK-UP

Fully adjustable 16 pc. aileron hook-up complete as shown. No play, no binding, super precision. Eliminates differential throw.



Safe and adjustable

Should be used on any plane utilizing strip ailerons.

No. 186 ..... **$2.95**

BALL LINK TOOL



Serves two uses. The curved end safely separates ball links and fits the 1/16" threaded ball link nut.

50¢ **No. 187**

BALL LINK SOCKETS



Extra nylon sockets - Fits all styles of Du-bro ball links.

No. 188 ..... 4 Each **$1.00**

AILERON HORN WIRE BALL LINKS



Excellent hook up assembly for strip ailerons. Eliminates differential throw

No. 189...2 Sets **$1.75**

1/16" THREADED BALL LINK





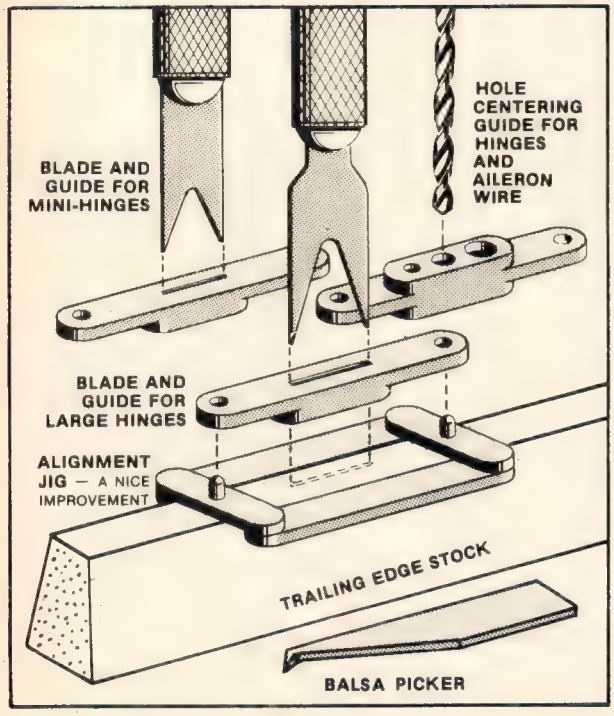
This new 4 piece threaded ball link set fits perfectly in servo arm holes, bellcranks, nylon horns and throttle arms. Strong and easy to hook up - Just bolt it on!

No. 190 **85¢**

PRICES SHOWN ARE RETAILS. SEE PAGE 165 FOR TOWER PRICES AND STOCK NUMBERS.

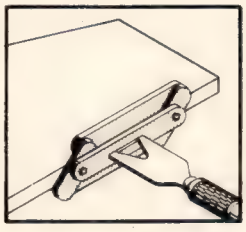
DU-BRO

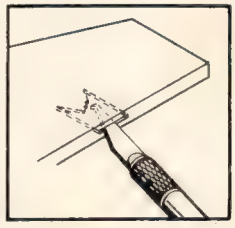
New! DU-BRO KWIK-HINGE SLOTTER



FOR LARGE AND SMALL HINGES. THE ONLY UNIVERSAL SLOTTING TOOL THAT NOT ONLY CENTERS, BUT GUIDES YOUR BLADE FOR PERFECTLY ALIGNED HINGE SLOTS EVERY TIME!

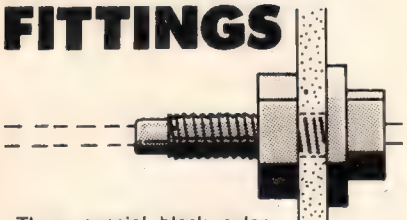
The black oxided, hardened steel blades fit neatly in a no. 2 x-acto knife handle and work in conjunction with our handy alignment jig that features 3 interchangeable snap-on guides. Two for large and small leaf hinges, and one for drilling 3 standard size holes to match any type of hinge you choose to use.





Cat. No. 216 **only $1.95**

WATER-PROOF PUSHROD FITTINGS



These special black nylon fittings are perfect for push rod exits on boats or seaplanes when used in conjunction with Du-Bro Kwik-Link Rods. These easy to install fittings will make any pushrod exit safe, free running and water tight. 3 sets for only $1.00, Cat. #214.

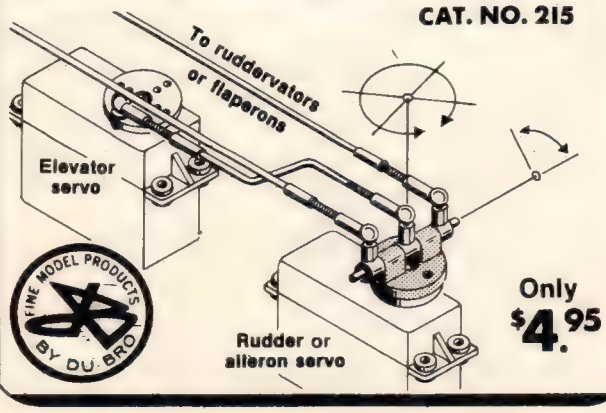


V-TAIL MIXER

FOR V-TAIL AIRPLANES AND FOR FLAPERONS

This ultra-complete mixer kit utilizes ball links throughout for an absolute "no play" linkage hook-up. Light, compact, easy to assemble and adjustable at either mixer or control surface.

CAT. NO. 215



PAGE 165

ALL OF THE DUBRO ITEMS SHOWN ON PAGES 159 THROUGH THIS PAGE AND ALL OF THE GOLDBERG ITEMS SHOWN ON PAGES 166 THROUGH 168 ARE LISTED HERE ALONG WITH RETAIL PRICE, TOWER PRICE, AND TOWER STOCK NUMBERS.

BETWEEN THESE TWO FINE LINES YOU WILL BE ABLE TO FIND JUST ABOUT ANY AND EVERY ACCESSORY YOU COULD EVER NEED. BOTH DUBRO AND GOLDBERG ARE FINE COMPANIES AND THEIR PRODUCTS ARE EXCELLENT QUALITY.

TAKE A FEW MINUTES AND ACQUAINT YOURSELF WITH THESE HANDY AND OFTENTIMES ABSOLUTELY NECESSARY ACCESSORIES. HAVING THE CORRECT ACCESSORY AT THE RIGHT TIME IS THE DIFFERENCE BETWEEN AN EASY INSTALLATION AND A NIGHTMARE.

A COMPLETE MODELERS WORKSHOP WILL ALWAYS HAVE A PARTS BIN TYPE CABINET FULL OF ALL KINDS OF ACCESSORIES. INSTEAD OF BUYING A $50.00 KIT OR ENGINE—PICK OUT AN ASSORTMENT OF $50.00 WORTH OF ACCESSORIES. IT WILL MAKE YOUR BUILDING IN THE FUTURE EFFORTLESS.

PRICES SHOWN ARE RETAILS. SEE PAGE 165 FOR TOWER PRICES AND STOCK NUMBERS.

DU-BRO

DUB20101	DUBRO 101 STRIP AILERON ASMBLY	2.95	2.65	159	DUB20151	DUBRO 151 KWIK KLIP W/CORD	1.40	1.30	162
DUB20102	DUBRO 102 CONTROL ROD ASSEMBLY	1.49	1.40	160	DUB20152	DUBRO 152 NOSE GEAR, BENT	2.95	2.65	161
DUB20103	DUBRO 103 STRIP AIL HORN CON-2	.79	.75	159	DUB20153	DUBRO 153 NOSE GEAR, STRAIGHT	2.95	2.65	161
DUB20104	DUBRO 104 STRIP AIL BEARINGS-2	.89	.85	159	DUB20154	DUBRO 154 NOSE GEAR WIRE 5/32	.75	.70	161
DUB20105	DUBRO 105 LG CONTROL HORNS L&R	.49	.47	160	DUB20155	DUBRO 155 STEERING ARM ASSMBLY	1.25	1.20	161
DUB20106	DUBRO 106 KWIK LINK 4 IN.	.49	.47	159	DUB20156	DUBRO 156 NOSE GEAR BLOCKS (2)	1.25	1.20	161
DUB20108	DUBRO 108 KWIK LINK 12 IN.	.49	.47	159	DUB20157	DUBRO 157 FRICTION BRAKE- NOSE	2.95	2.65	161
DUB20109	DUBRO 109 KWIK LINK CLEVIS (2)	.75	.70	159	DUB20158	DUBRO 158 LANDING GR STRAPS(4)	.40	.37	161
DUB20110	DUBRO 110 COUPLING SLEEVES (4)	.30	.29	160	DUB20159	DUBRO 159 NYLON WING BOLT SET	1.25	1.20	161
DUB20111	DUBRO 111 THREADED COUPLERS(2)	.40	.37	160	DUB20160	DUBRO 160 PROP BALANCER	2.95	2.65	161
DUB20112	DUBRO 112 SOLDER LINKS (2)	.69	.65	159	DUB20161	DUBRO 161 R/C TANK FILTER	1.15	1.10	227
DUB20114	DUBRO 114 SM SERVO MTG. HDWE-5	1.20	1.15	160	DUB20163	DUBRO 163 FOAM TAPE - 3 FT.	.75	.70	161
DUB20115	DUBRO 115 SM RUBBER GROMETS-20	.80	.75	160	DUB20164	DUBRO 164 NYLON WING BOLTS (2)	.75	.70	161
DUB20116	DUBRO 116 LARGE NYLON HINGE-6	1.10	1.05	161	DUB20165	DUBRO 165 FLEX CABLE 20 IN.	1.49	1.35	160
DUB20117	DUBRO 117 LARGE NYLON HINGE-15	2.49	2.10	161	DUB20166	DUBRO 166 STEERING ARM LONG	.75	.70	161
DUB20118	DUBRO 118 SMALL NYLON HINGE-6	1.00	.95	161	DUB20167	DUBRO 167 90D. BELLCRANK ASY-2	.75	.70	160
DUB20119	DUBRO 119 SMALL NYLON HINGE-15	1.95	1.85	161	DUB20168	DUBRO 168 2-56 LOCK NUTS (12)	1.10	1.05	162
DUB20120	DUBRO 120 OVERRIDE SERVO SAVER	.98	.95	160	DUB20169	DUBRO 169 3-48 LOCK NUTS (12)	1.10	1.05	162
DUB20121	DUBRO 121 E-Z CONNECTORS (2)	.98	.95	160	DUB20170	DUBRO 170 4-40 LOCK NUTS (12)	1.10	1.05	162
DUB20122	DUBRO 122 NYLON KWIK LINK (2)	.39	.37	159	DUB20171	DUBRO 171 6-32 LOCK NUTS (12)	1.10	1.05	162
DUB20123	DUBRO 123 NYLON LINK W/ROD	.29	.27	159	DUB20172	DUBRO 172 12 IN. THREADED ROD	.15	.14	160
DUB20124	DUBRO 124 NYLON BEARING 3/32-4	.75	.70	159	DUB20173	DUBRO 173 30 IN. THRD RODS(12)	3.60	3.50	160
DUB20125	DUBRO 125 MTG BOLT/NUTS 256(4)	.50	.47	162	DUB20174	DUBRO 174 2-56X1/2 BOLT SET -4	.50	.47	162
DUB20126	DUBRO 126 MTG BOLT/NUTS 348(4)	.50	.47	162	DUB20175	DUBRO 175 3-48X3/4 BOLT SET -4	.50	.47	162
DUB20127	DUBRO 127 MTG BOLT/NUTS 440(4)	.55	.52	162	DUB20176	DUBRO 176 4-40X1-1/4 BLT SET-4	.55	.52	162
DUB20128	DUBRO 128 MTG BOLT/NUTS 632(4)	.55	.52	162	DUB20177	DUBRO 177 6-32X1-1/4 BLT SET-4	.55	.52	162
DUB20129	DUBRO 129 SKT BOLT&BN 440X1 -4	1.10	1.05	162	DUB20178	DUBRO 178 SKT BOLT &LN 440X1 4	1.10	1.05	162
DUB20130	DUBRO 130 SKT BOLT&BN 632X1 -4	1.10	1.05	162	DUB20179	DUBRO 179 SKT BOLT &LN 632X1 4	1.10	1.05	162
DUB20131	DUBRO 131 SOCKET WRENCHES (2)	1.10	1.05	162	DUB20180	DUBRO 180 BOLT-ON BALL LINK	.85	.80	163
DUB20132	DUBRO 132 BALL WRENCH SET (2)	4.25	3.80	162	DUB20181	DUBRO 181 THREADED BALL LINK	.85	.80	163
DUB20133	DUBRO 133 BLIND NUTS 256 (4)	.35	.33	162	DUB20182	DUBRO 182 RIVET BALL LINK	.85	.80	163
DUB20134	DUBRO 134 BLIND NUTS 348 (4)	.35	.33	162	DUB20183	DUBRO 183 DUAL TAKE-OFF LINK	1.00	.95	163
DUB20135	DUBRO 135 BLIND NUTS 440 (4)	.35	.33	162	DUB20184	DUBRO 184 NYLON LINK W/ROD (5)	1.39	1.30	160
DUB20136	DUBRO 136 BLIND NUTS 632 (4)	.40	.37	162	DUB20185	DUBRO 185 KWIK LINK 12 IN. (5)	2.25	2.15	160
DUB20137	DUBRO 137 DURA COLLARS 1/16(4)	.80	.75	161	DUB20186	DUBRO 186 AIL. BALL LINK ASSLY	2.95	2.75	163
DUB20138	DUBRO 138 DURA COLLARS 3/32(4)	.80	.75	161	DUB20187	DUBRO 187 BALL LINK TOOL	.50	.47	163
DUB20139	DUBRO 139 DURA COLLARS 1/8 (4)	.80	.75	161	DUB20188	DUBRO 188 BALL LINK SOCKET (4)	1.00	.95	163
DUB20140	DUBRO 140 DURA COLLARS 5/32(4)	.80	.75	161	DUB20189	DUBRO 189 HORN WIRE BALL LINK2	1.75	1.65	163
DUB20141	DUBRO 141 DURA COLLARS 3/16(4)	.80	.75	161	DUB20190	DUBRO 190 1/14 THRD BALL LINK	.85	.80	163
DUB20146	DUBRO 146 MUFFLER STRAP	1.50	1.40	223	DUB20203	DUBRO 203 KWIK-SWITCH MOUNT	1.75	1.65	159
DUB20147	DUBRO 147 KWIK GLOW PLUG CORD	2.25	2.00	162	DUB20212	DUBRO 212 LG THRD COUPLER(5)	1.20	1.15	160
DUB20148	DUBRO 148 1/2 A KWIK KLIP	.75	.70	162	DUB20214	DUBRO 214 WATERPROOF FITINGS-3	1.00	.95	164
DUB20149	DUBRO 149 1/2 A KLIP W/CORD	1.25	1.20	162	DUB20215	DUBRO 215 V-TAIL MIXER	4.95	4.45	164
DUB20150	DUBRO 150 KWIK KLIP	.85	.80	162	DUB20216	DUBRO 216 KWIK-HINGE SLOTTER	1.95	1.85	164
					DUB20228	DUBRO 228 MINI KWIK LINKS (2)	.39	.37	266

GOLDBERG

GBG20101	GOLDBERG N1 NYLON TAPE 3/4 IN	.35	.33	166	GBG26105	GOLDBERG NMB-1 90 DEG. BRACKET	.50	.47	168
GBG20102	GOLDBERG N2 NYLON TAPE 2 1/2	.59	.55	166	GBG26119	GOLDBERG SN-180 1/8 NOSE GEAR	2.75	2.45	166
GBG20140	GOLDBERG NYLON TAPE 4 IN. N4	.89	.85	166	GBG26120	GOLDBERG SNA-532 5/32 NOSE SET	3.50	3.15	166
GBG20141	GOLDBERG NYLON TAPE 6 IN. N6	1.25	1.20	166	GBG26216	GOLDBERG G16N STEER NOSE GEAR	2.75	2.45	167
GBG20159	GOLDBERG WHITE & BROWN 72.080	.98	.95	166	GBG26301	GOLDBERG NB532 NOSE GR BEARING	.75	.70	167
GBG20160	GOLDBERG WHITE & BLUE 72.160	.98	.95	166	GBG26302	GOLDBERG NB180 NOSE GR BEARING	.75	.70	167
GBG20161	GOLDBERG WHITE & RED 72.240	.98	.95	166	GBG26401	GOLDBERG SA532 STEERG ARM 5/32	.75	.70	167
GBG20162	GOLDBERG WHITE & VIOLET 72.320	.98	.95	166	GBG26403	GOLDBERG AH83 ADJ HORN BRKT-4	.50	.47	167
GBG20163	GOLDBERG WHITE & ORANGE 72.400	.98	.95	166	GBG27101	GOLDBERG JB6 J-BOLTS & NUTS	.45	.43	167
GBG20164	GOLDBERG WHITE & YELLOW 72.960	.98	.95	166	GBG27106	GOLDBERG LJB6 LONG J-BOLTS	.69	.65	167
GBG20165	GOLDBERG WHITE & GREEN 75.640	.98	.95	166	GBG27128	GOLDBERG WS-1 WING SKIDS	.50	.47	166
GBG20200	GOLDBERG WC-116 COLLARS 1/16''	.89	.85	168	GBG27129	GOLDBERG LGS-38 3/8 GEAR STRAP	.50	.47	166
GBG20202	GOLDBERG WC-332 COLLARS 3/32''	.89	.85	168	GBG27130	GOLDBERG LGS-50 1/2 GEAR STRAP	.50	.47	166
GBG20204	GOLDBERG WC-180 COLLARS 1/8''	.89	.85	168	GBG27131	GOLDBERG WRS-116 1/16 RETAIN	.39	.37	166
GBG20206	GOLDBERG WC-532 COLLARS 5/32''	.89	.85	168	GBG27132	GOLDBERG WRS-332 3/32 RETAIN	.39	.37	166
GBG20208	GOLDBERG WC-316 COLLARS 3/16''	.89	.85	168	GBG27136	GOLDBERG LGC-180 LG CLAMPS 1/8	.50	.47	168
GBG22005	GOLDBERG AA1 ADJUSTABLE AXLE	.75	.70	167	GBG27137	GOLDBERG LGC-532 LG CLAMP 5/32	.50	.47	168
GBG23000	GOLDBERG PEG3 PUSHROD EXIT AIL	.69	.65	168	GBG27146	GOLDBERG SMS2-50 2X1/2 SCREWS	.40	.37	166
GBG23001	GOLDBERG PEG1 PUSHROD EXIT LG.	.75	.70	168	GBG27148	GOLDBERG SMS4-50 4X1/2 SCREWS	.40	.37	166
GBG23002	GOLDBERG PEG2 PUSHROD EXIT SM.	.75	.70	168	GBG27201	GOLDBERG SD1 SAFETY DRIVER LG.	.98	.95	167
GBG23003	GOLDBERG SK1 SNAP-R-KEEPER	.50	.45	167	GBG27202	GOLDBERG SD2 SAFETY DRIVER SM.	.98	.95	167
GBG23004	GOLDBERG PC-1 PUSHROD CONECTRS	.98	.95	166	GBG27302	GOLDBERG SMS2-38 2X3/8 SCREWS	.35	.33	167
GBG23011	GOLDBERG PEG1H LG. HOODED EXIT	.69	.65	168	GBG27304	GOLDBERG SMS4-40 4X3/8 SCREWS	.35	.33	167
GBG23012	GOLDBERG PEG2H SM. HOODED EXIT	.69	.65	168	GBG27404	GOLDBERG BN4 #4-40 BLIND NUTS	.35	.33	167
GBG24207	GOLDBERG RK2-7 KLETT HINGE SM.	1.10	.90	167	GBG27406	GOLDBERG SN1 SNAP NUTS (4)	.40	.37	167
GBG24215	GOLDBERG RK2-15 KLETT HINGE SM	1.95	1.60	167	GBG27501	GOLDBERG EB1 ENGINE BRACKET	.69	.65	219
GBG24307	GOLDBERG RK3-7 KLETT HINGE LG	1.25	1.00	167	GBG28401	GOLDBERG SH-401 4-40X1/8 SCRWS	.49	.47	168
GBG24315	GOLDBERG RK3-15 KLETT HINGE LG	2.35	1.90	167	GBG28404	GOLDBERG SH-404 4-40X1/2 SCRWS	.49	.47	168
GBG24340	GOLDBERG RK4 FLEX FT HNG-SM 18	1.20	1.15	167	GBG28406	GOLDBERG SH-406 4-40X3/4 SCRWS	.49	.47	168
GBG24350	GOLDBERG RK5 FLEX FT HNG-MED18	1.20	1.15	167	GBG28408	GOLDBERG SH-408 4-40X1 SCREWS	.49	.47	168
GBG24400	GOLDBERG HSK-1 HINGE SLOT KIT	1.95	1.85	168	GBG28410	GOLDBERG SH-410 4-40X1.25 SCRW	.69	.65	168
GBG24402	GOLDBERG HM-1 HINGE-LINE MARKR	.50	.45	168	GBG28412	GOLDBERG SH-412 4-40X1.5 SCRWS	.69	.65	168
GBG24404	GOLDBERG SF-1 SLOT FORK BLADE	.50	.45	168	GBG28601	GOLDBERG SH-601 6-32X1/8 SCRWS	.69	.65	168
GBG24406	GOLDBERG SH-1 SLOT HOOK BLADE	.50	.45	168	GBG28604	GOLDBERG SH-604 6-32X1/2 SCRWS	.49	.47	168
GBG25101	GOLDBERG EZ1 LINK W/ROD	.49	.45	167	GBG28606	GOLDBERG SH-606 6-32X3/4 SCRWS	.49	.47	168
GBG25102	GOLDBERG EZ2 EZ LINK	.69	.65	167	GBG28608	GOLDBERG SH-608 6-32X1 SCREWS	.49	.47	168
GBG25103	GOLDBERG EZ3 SOLDER EZ LINK	.69	.65	166	GBG28610	GOLDBERG SH-610 6-32X1.25 SCRW	.69	.65	168
GBG25109	GOLDBERG AF1 1/16 AIL PUSHRODS	.75	.70	166	GBG28612	GOLDBERG SH-612 6-32X1.5 SCRWS	.69	.65	168
GBG25201	GOLDBERG LR-1 LINK RODS (6)	.59	.55	167	GBG29101	GOLDBERG AB1 AILERON BELLCRANK	.59	.55	167
GBG25301	GOLDBERG SL1 SNAP-LINK W/ROD	.29	.27	167	GBG29102	GOLDBERG BCH1 1/2A BELLCRANK	.35	.33	167
GBG25302	GOLDBERG SL2 SNAP-LINK	.40	.37	167	GBG29110	GOLDBERG SAH-332 3/32 AIL HORN	.98	.95	166
GBG25400	GOLDBERG SA-180 1/8 STEER. ARM	.75	.70	167	GBG29201	GOLDBERG CH1 LONG CONTROL HORN	.50	.45	167
GBG25401	GOLDBERG MS-1 MINI-SNAP W/ROD	.29	.27	167	GBG29202	GOLDBERG CH2 SMALL CONTRL HORN	.50	.45	167
GBG25402	GOLDBERG MS2 MINI-SNAP	.40	.37	167	GBG29204	GOLDBERG AB4 AIL & ELEV HORN	.75	.70	168
GBG26101	GOLDBERG TB1 TAILWHEEL BRACKET	.40	.37	167	GBG29301	GOLDBERG AC1 AILERON COUPLER	.69	.65	168

GOLDBERG

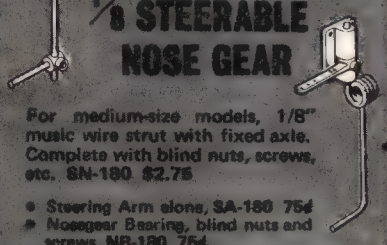
NEW PRODUCTS FOR FLYING FUN

5/32" STEERABLE NOSE GEAR with ADJUSTABLE AXLE



For large models, long 5/32" music wires strut and adjustable axle. Complete with blind nuts, screws, etc. SNA-532 $3.50.

1/8" STEERABLE NOSE GEAR

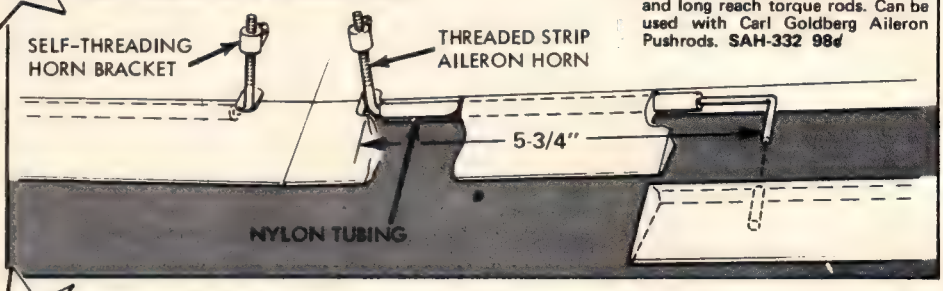


For medium-size models, 1/8" music wire strut with fixed axle. Complete with blind nuts, screws, etc. SN-180 $2.75

- Steering Arm alone, SA-180 75¢
- Nosegear Bearing, blind nuts and screws, NB-180 75¢

STRIP AILERON HORN SET

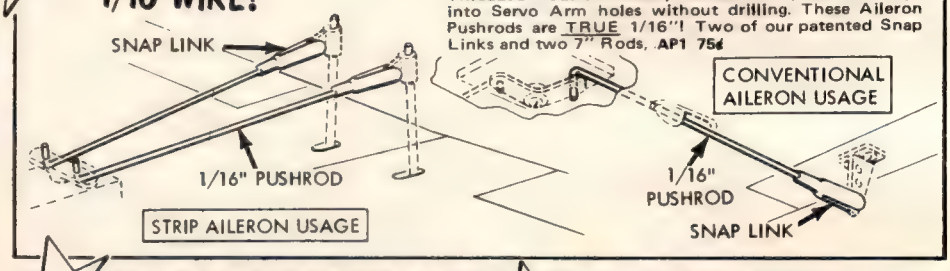
This simple Strip Aileron Horn Set provides easy adjustment of throw, and long reach torque rods. Can be used with Carl Goldberg Aileron Pushrods. SAH-332 98¢



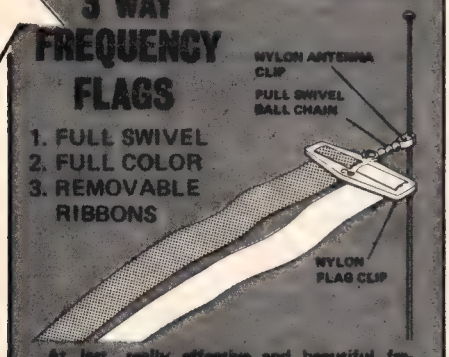
AILERON PUSHRODS 1/16" WIRE!

DON'T DRILL OUT SERVO ARMS!
USE TRUE 1/16" AILERON PUSHRODS

Threaded Rods are usually oversize 1/16," and won't go into Servo Arm holes without drilling. These Aileron Pushrods are TRUE 1/16"! Two of our patented Snap Links and two 7" Rods, AP1 75¢

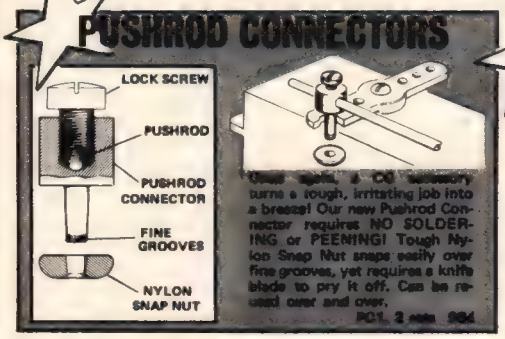


3 WAY FREQUENCY FLAGS



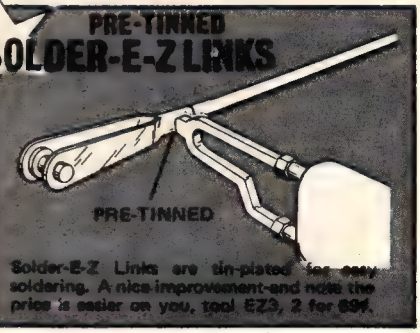
At last, really effective and beautiful frequency flags! Your choice of 7 popular color combinations. Nylon clips are joined with full-swivelling ball chain for free action. Antenna clip allows full collapse of thin final antenna segment to prevent damage. FF1 99¢

PUSHROD CONNECTORS



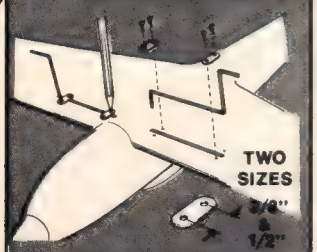
Quick, quiet, a CG accessory turns a rough, irritating job into a breeze! Our new Pushrod Connector requires NO SOLDERING or PEENING! Tough Nylon Snap Nut snaps easily over fine grooves, yet requires a knife blade to pry it off. Can be reused over and over. PC1, 2 sets 99¢

PRE-TINNED SOLDER-E-Z LINKS



Solder-E-Z Links are tin-plated for easy soldering. A nice improvement-and note the price is easier on you, too! EZ3, 2 for 69¢.

NYLON LANDING GEAR STRAPS



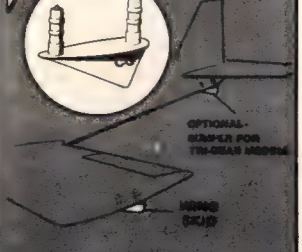
These tough Nylon Straps provide strong and electrically noiseless strut retention. 2 sizes available. 4 Straps, 8 screws, LGS-38 and LGS-50, 89¢ a set

WHEEL RETAINING SPRINGS



For many smaller models and tail-wheels, etc., these special springs do a good job of holding the wheels on. 2 sizes available. 6 Springs, 6 washers. WRS-116 and WRS-332, 39¢ a set

NYLON WING SKIDS



Even top flyers can't keep gusty winds from dropping a wing tip to the runway while landing. CG Nylon Wing Skids help prevent ugly scrapes. WS1, 2 for 89¢

NEW! 4" AND 6" WIDE NYLON REINFORCING TAPE



Extremely tough when applied with epoxy.

6"	wide x 5 ft.	$1.25	N6
4"	wide x 5 ft.	.89	N4
2 1/2"	wide x 5 ft.	.59	N2
3/4"	wide x 5 ft.	.35	N1

SHEET METAL SCREWS

LONGER SIZES
#2 x 1/2"
#4 x 1/2"



Sharp, clean, full-depth threads, hard and strong. Excellent for mounting servos, etc. Includes washers; No. 2 x 1/2" SMS2-50, 40¢ for 10; No. 4 x 1/2" SMS4-50, 40¢ for 8.

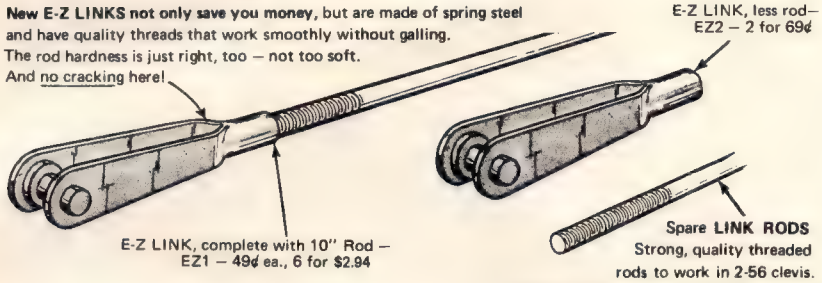
PRICES SHOWN ARE RETAILS. SEE PAGE 165 FOR TOWER PRICES AND STOCK NUMBERS.

GOLDBERG

Spring Steel E·Z LINKS with 10" Rod

49¢ Each or 6 for $2.94

New E-Z LINKS not only save you money, but are made of spring steel and have quality threads that work smoothly without galling. The rod hardness is just right, too – not too soft. And no cracking here!



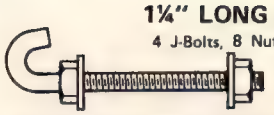
E-Z LINK, less rod– EZ2 – 2 for 69¢

E-Z LINK, complete with 10" Rod – EZ1 – 49¢ ea., 6 for $2.94

Spare **LINK RODS** Strong, quality threaded rods to work in 2-56 clevis. Rod hardness just right. LR1 – 6 for 59¢

1¼" LONG J-BOLTS

4 J-Bolts, 8 Nuts, 8 Washers LJB6 69¢



Long J-Bolts are especially useful for holding tanks in place as illustrated here on profile fuseloges.



1/2" J-BOLTS. JB6 4 for 45¢.

TAILWHEEL BRACKET TBI-40¢

The simplest tailwheel mounting bracket yet— just cut a slot in the rear bottom of the fuselage, smear epoxy on the glue fin, and slide it into place.



NEW! SMALL FLEX POINT HINGES FOR 1/8" BALSA – BY KLETT

YOU ASKED FOR IT!!!

Modelers not only accepted our REGULAR FLEX POINT HINGE, but asked for small ones for 1/8" balsa. So– ***HERE IT IS!***



DESIGN ADVANTAGES:

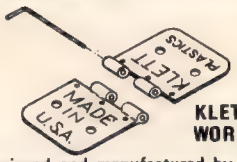
Simplest possible installation—Drill holes, and apply epoxy.

Easy to get ailerons very close to wing for maximum effect.

Web area combined with barbed shank absorbs vibration and flutter permitting the hinge to flex only at the hinge line.

Web provides visual axis alignment.

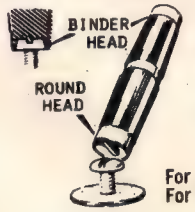
RK4 SMALL 18 for $1.20
RK5 REGULAR 18 for $1.20



KLETT HINGES – WORLD'S FINEST!

Designed and manufactured by Roy Klett, originator of world-famous RK hinges. An exclusive with Carl Goldberg, these hinges are made with exceptional care and attention to detail. The small RK2 hinges are so thin all you need is a knife slit. The regular size RK3 hinges are the slickest you've ever seen – try holding one leaf and waving the other! And both have **removable music wire** pins. Ask your dealer for the best – Klett hinges.

RK2-7	7 for $1.10	RK2-15	15 for $1.95
RK3-7	7 for $1.25	RK3-15	15 for $2.35



NEW KLETT SAFETY DRIVER SOCKETS DOWN ONTO SCREW HEAD – CAN'T SLIP OFF AND DAMAGE YOUR WING! Takes Round Head Screws and Binder Head.

KLETT SAFETY DRIVER

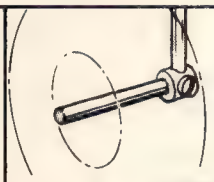
For ¼" Nylon Screws SD1 } 98¢ ea
For #10 Nylon Screws SD2 }

NEW! KLETT PUSHROD EXIT GUIDES



To protect your fuselage and insure smooth operation of your pushrods. Precision made of tough nylon. Easy installation. Large for 5/64" wire, small for 1/16" wire.

PEG-1 LARGE 4 per pkg. 75¢
PEG-2 SMALL 4 per pkg. 75¢



5/32" ADJUSTABLE AXLE

Adjustable axle allows you to easily have the strut length you want. Both the axle and screw are hardened steel. Just file a flat on the strut, and tighten axle in place. AA1 75¢ ea.



STEERABLE NOSE GEAR

Versatile – steering arm can be to either side, or slightly up or down, or mounted on bottom with extra collar in slot. Steering arm is nylon, stiff enough for good control, yet can flex under shock to protect servo. Collar is hardened steel – won't strip like brass. Screw is hardened steel, too. You can really torque it and get good grip on music wire strut without a flat.

Complete steerable nose gear with nylon bearing, 3/32" plated music wire strut, extra collar, blind nuts, screws and washers G16N $2.75.



NYLON STEERING ARM

Hardened steel collar and screw 75¢.



NYLON BEARING

One-piece design mounts to firewall without alignment problems. Includes blind nuts, screws and washers 75¢.



CONTROL HORNS

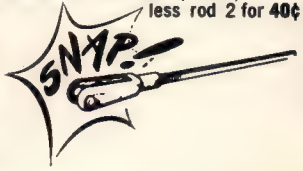
Our new horns have the upright part rising from the center of the base for maximum stability. Holes are right size for 1/16" wire; nut plate for simplest mounting. Long horns CH1 or short horns CH2, with screws—50¢/2.

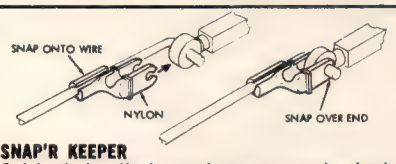
UNIQUE SNAP-LINK! Patent 3711134. Now for the first time—you can buy a truly safe link—the SNAP-Link!

- Tiny 45° shoulder snaps through arm, prevents accidental opening. So unique it's Patented.
- One-piece design—no separate pieces that might come apart.

Snap-Link, Regular, with rod SL1 } 29¢ ea
Mini-Snap-Link, with rod MS1 }
Snap-Link SL2 or Mini-Snap MS2, less rod 2 for 40¢





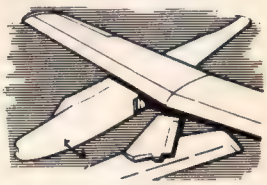


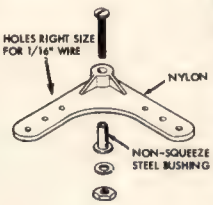
SNAP'R KEEPER

Quickest, handiest way to secure pushrod wire end to servos, horns, etc. Works on wire ¾ to ¾" diameter. SK1 50¢ for 4.

REPLACEMENT FOAM WINGS, ETC.

To go with your own design fuselage. Proven efficient Ranger 42 foam wing gets you in the air quickly – $6.50. Stab and vertical fin, set $3.50 Assembled Ranger 42 fuselage, plus bearers, nosegear, etc., $12.95





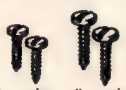
AILERON BELLCRANK

Bellcrank has steel bushing of proper size, so crank can be screwed firmly in place without binding. No electrical noise—all metal parts are screwed tightly together— AB1 59¢ for 2.



½A BELLCRANK and HORN

Made of nylon, this new set provides smooth ½A control line operation. Easy on dacron lines, too BCH1 35¢.



SHEET METAL SCREWS

Like wood screws, but better. Sharp, clean, full-depth threads, hard and strong. Excellent for mounting servos, etc. Includes washers– No. 2 x 3/8 SMS2 35¢ for 10; No. 4 x 3/8 SMS4 35¢ for 8.

BLIND NUTS



No. 4-40 blind mounting nuts are by far the most popular size. Ours are steel, made to high quality standards, and plated for corrosion prevention. ..... 35¢ for 4

WING KITS

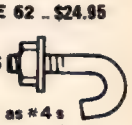


For FALCON 56 and SKYLARK 56 Can be used on either ship $15.95

For SR. FALCON Easily built, strong $24.95

SKYLANE 62 .. $24.95

#6 J-BOLTS & NUTS

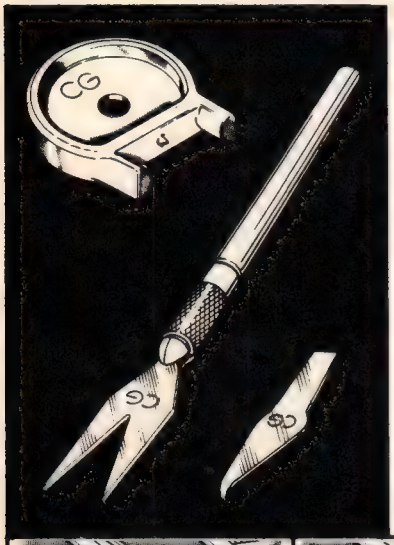


Twice as strong as #4 s 4 for 45¢

PRICES SHOWN ARE RETAILS. SEE PAGE 165 FOR TOWER PRICES AND STOCK NUMBERS.

GOLDBERG

HINGE SLOTTING KIT



Here at last is a uniquely simply Hinge Slotting System - makes hinge slots so easy you'll wish you'd had it years ago! First, the Hinge - Line Marker, developed from a great suggestion by modeler Mike Corbett. Takes trailing edges, etc., 3/16" to 9/16" thick, and scribes an accurate center-line in seconds! Does it even if the trailing edge is tapered! No measuring needed!

Next, the Slotting Fork pierces a slot the correct thickness and width in 2 to 5 seconds! So easy you just won't believe it!

And to slot a wide solid balsa stab or fin, you first use the Fork, then clean out the chips with the Slotting Hook!

Complete Hinge Slotting Kit including special aluminum handle **HSK-1 $1.95**

Replacement Parts available

Hinge-Line Marker	**HM-1**	**50¢**
Slotting Fork blade	**SF-1**	**50¢**
Slotting Hook Blade	**SH-1**	**50¢**



Tilt Marker so Guide Pegs touch the wood, then lightly pass the Marker back and forth Point will scribe center-line.

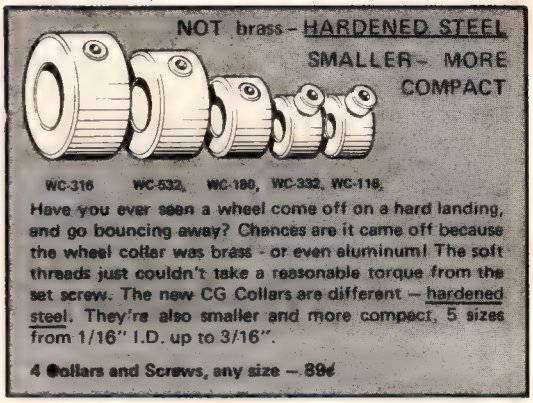


For normal trailing edges, etc., line up Slotting Fork on center line and push through. Use end of handle to press in a recess for hinge knuckle.



Slotting Hook digs out slots quickly in wide balsa. With practice, using the Slotting Fork first works out a little better.

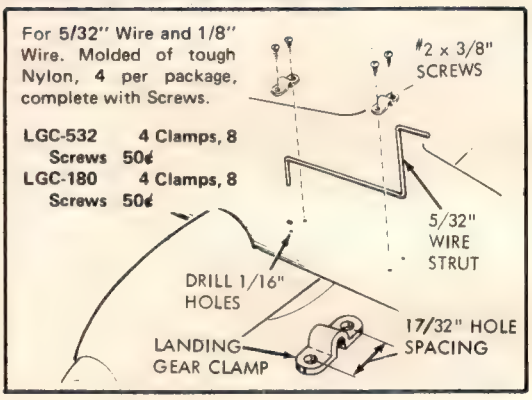
COLLARS



Have you ever seen a wheel come off on a hard landing, and go bouncing away? Chances are it came off because the wheel collar was brass - or even aluminum! The soft threads just couldn't take a reasonable torque from the set screw. The new CG Collars are different — hardened steel. They're also smaller and more compact, 5 sizes from 1/16" I.D. up to 3/16".

4 Collars and Screws, any size — 89¢

LANDING GEAR CLAMPS



For 5/32" Wire and 1/8" Wire. Molded of tough Nylon, 4 per package, complete with Screws.

LGC-532 4 Clamps, 8 Screws 50¢
LGC-180 4 Clamps, 8 Screws 50¢

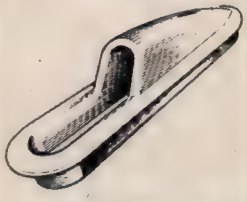
AILERON & ELEVATOR HORN BEARING



If you like precision fits, ask to see the KLETT Horn Bearing. Superior to others, it reduces play, and has a thin tapered tab to facilitate entry into a slot, and holes for glue.

AB4—4 for 75¢

AILERON PUSHROD EXIT



A beautiful fairing where the aileron pushrod exits your wing. Easy to install. Made from natural nylon.

PEG3—2 for 69¢

HOODED PUSHROD EXIT GUIDE



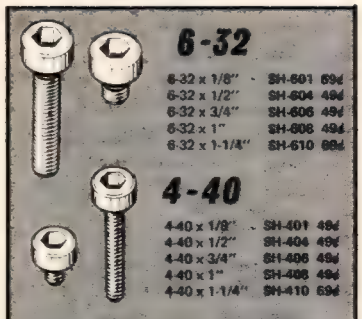
For 5/64" Wire PEG1-H 2 for 69¢
For 1/16" Wire PEG2-H 2 for 69¢

REGULAR PUSHROD EXIT GUIDE



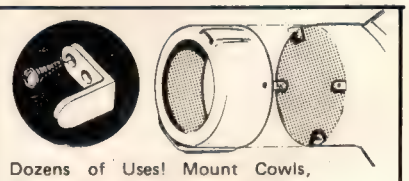
For 5/64" Wire PEG1 4 for 75¢
For 1/16" Wire PEG2 4 for 75¢

SOCKET HEAD SCREWS



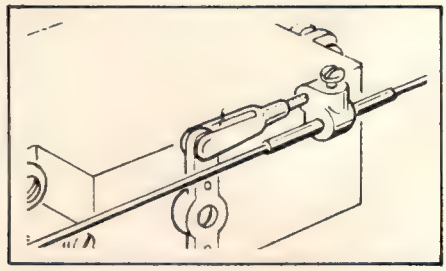
Socket Head screws have long been favored by expert modelers. They are made of a higher alloy steel, and can be torqued down precisely. Now for the first time, very short and long lengths are made available in 2 popular thread sizes. 4 screws and 4 washers per set.

90° MOUNTING BRACKETS



Dozens of Uses! Mount Cowls, Canopies, Internal Pushrod Guides, etc. Molded of Nylon, 4 per package, with Screws.

NMB-1 Four 90° Mounting Brackets, 8 Screws **50¢**



Carl Goldberg/Aileron Coupler. A new solution to an age old problem of connecting conventional aileron pushrod to aileron servo is solved through this simple fitting. As shown in the drawing, the tube is soldered to the pushrod and unit is adjustable through a nylon Snap-Link.

SEE PAGES 166 AND 167 FOR MORE GOLDBERG ACCESSORIES. SEE PAGE 165 FOR ALL GOLDBERG PRICES AND CORRESPONDING TOWER STOCK NUMBERS.

HALLCO

HALLCO Temper-Lock LANDING GEARS



9 SIZES-AVAILABLE!

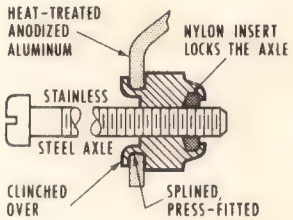
	TOWER STOCK NUMBER	THICKNESS	MOUNTING SURFACE	TREAD WIDTH	HEIGHT	AXLE SIZE	SUGGESTED WEIGHT CAPACITY (lbs.)
MEDIUM DUTY	HAL26051	.040	1.0 x 2.0	7.0	1.8	6-32	Under 1.7
	HAL26052	.050	1.1 x 2.5	8.7	2.0	6-32	1.7 - 2.7
	HAL26053	.060	1.2 x 3.0	10.3	2.4	8-32	2.7 - 3.5
	HAL26054	.080	1.5 x 3.2	12.8	3.2	8-32	3.5 - 4.5
	HAL26055	.100	2.0 x 3.5	15.0	3.9	8-32	4.5 - 6.0
HEAVY DUTY	HAL26063	.080	1.2 x 3.0	10.3	2.4	8-32	3.5 - 4.5
	HAL26064	.100	1.5 x 3.2	12.8	3.2	8-32	4.5 - 6.0
	HAL26065	.125	2.0 x 3.5	15.0	3.9	8-32	6.0 - 8.0
	HAL26066	.125	2.5 x 4.0	18.0	4.8	10-32	8.0 - 10.0

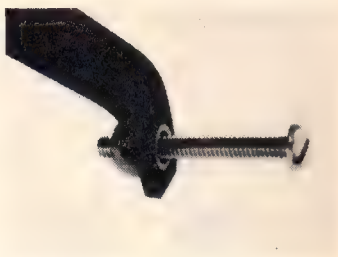
FEATURES:

* STAINLESS STEEL AXLES (FURNISHED) ARE LOCKED IN POSITION BY THE NYLON INSERT IN THE NUT. NUT IS SPLINED, PRESS-FITTED AND CLINCHED.

* THE LANDING GEAR, MADE OF HEAT-TREATED ALUMINUM ALLOY, WILL DEFLECT AND SPRING BACK WITHOUT TAKING A SET.

* BLACK OR CLEAR ANODIZING PROVIDES IMPROVED APPEARANCE AND CORROSION RESISTANCE. THE ANODIZED SURFACE WILL GIVE IMPROVED ADHESION IF YOU PREFER TO APPLY LACQUER, ENAMEL OR DOPE.





HAL26051	HALLCO MED. 7.0 TREAD #B105-1	3.50	3.30
HAL26052	HALLCO MED. 8.7 TREAD #B105-2	3.95	3.75
HAL26053	HALLCO MED. 10.3 TREAD #B105-3	4.25	4.00
HAL26054	HALLCO MED. 12.8 TREAD #B105-4	4.75	4.40
HAL26055	HALLCO MED. 15.0 TREAD #B105-5	5.25	4.85
HAL26063	HALLCO HVY. 10.3 TREAD #B106-3	4.55	4.30
HAL26064	HALLCO HVY. 12.8 TREAD #B106-4	5.25	4.85
HAL26065	HALLCO HVY. 15.0 TREAD #B106-5	5.75	5.40
HAL26066	HALLCO HVY. 18.0 TREAD #B106-6	6.95	6.25

KRAFT

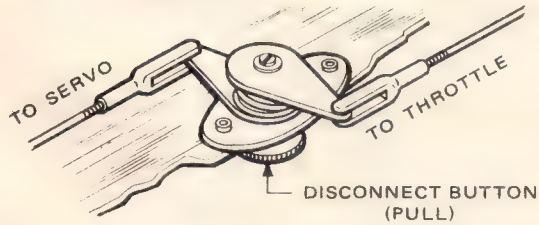
Designed for "V" tails, wings, and powered delta-type aircraft.



Part No. 200-087

ELEVON LINKAGE KIT (Operates elevons or flaperons from two KPS-12 servos or a two-channel receiver-servo block.)
Part No. 200-087

UNIVERSAL LINKAGE KIT (For use with servos other than KPS-12.) Part No. 200-117



With this convenient actuator, it isn't necessary to turn on the transmitter to operate the engine. Throttle linkage from servo is disengaged and re-engaged with easily accessible spring-loaded knob.
Part No. 200-116..

KRA20087	KRAFT 200-087 ELEVON LINKAGE	3.98	3.75
KRA20100	KRAFT 200-100 ACCESSORY ASST	2.49	2.30
KRA20105	KRAFT 200-105 POLY HINGES (20)	1.39	1.35
KRA20116	KRAFT 200-116 MAN THROT ACT	2.98	2.80
KRA20117	KRAFT 200-117 UNVSL ELEVON LNG	3.98	3.75
KRA20128	KRAFT 200-128 NYLON CLEVIS	.98	.95

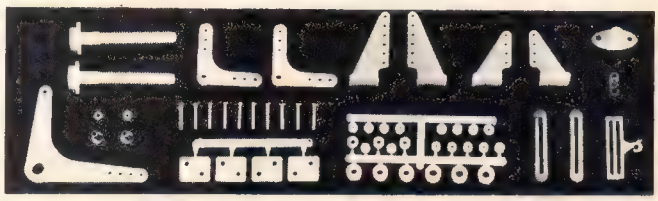
NYLON CLEVIS

Nylon clevis with a durable snap-lock steel pin.

Clevis with 10" steel rod allows for an adjustment of 5/8"
P/N 200-128



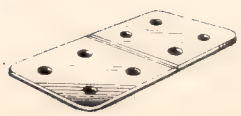
ACCESSORIES ASSORTMENT



2 Extra Long Horns, 2 Regular Horns, 4 Horn Plates, 2 (90°) Bellcranks, 1 Flying Stab Bellcrank, 2 Push Rod Exits, 1 Antenna Flag Clip. 1 Receiver Antenna Clip, 1 (6/32) Nut Plate, 3 (5/32) Push-on Collars, 3 (1/8) Push-on Collars, 3 (3/32) Push-on Collars, 13 (1/16) Push-on Collars, 2 (.045) Push-on Collars, 10 (2-56x½) Machine Screws, 2 (2-56) Nuts, 2 Bellcrank Bushings, 2 (¼-20) Wing Hold Down Nylon Bolts.
P/N 200-100

HINGES

These "live" polypropylene hinges are designed to dampen flutter, withstand high vibration, and to resist gumming from epoxy, glue or dirt. 20 Per Pkg.
P/N 200-105



PRATHER

NEW TYPE FLUSH FITTING CAMLOC



Flush Camlocks works great for cheek cowls and hatch covers.

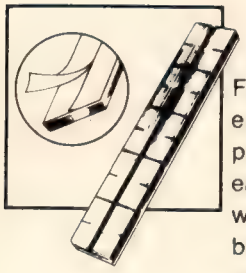
They fit flush and hold securely in place. You do not have to bolt your cheek cowls or hatch covers anymore.

With flush Camlocs, cheeks cowls and hatch covers can be removed and replaced in a matter of seconds.

EASY TO INSTALL

Complete with Retainer and Lock Ring

STICK-ON WEIGHT



For those hard to get places, no epoxy needed - simply sticks into position. Balancing your plane is easy when you use our stick-on weights. A balanced plane flys better and is easier to handle. A must for every Flying Box.

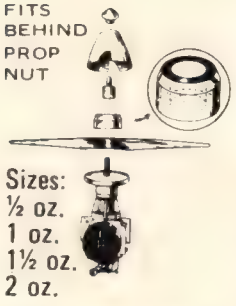
PKG. OF 2

LEAD

Increments of ¼ oz. and ½ oz. ▪
Strong Stick Tape on Back ▪

NOSE WEIGHT

FOR: R/C • U-CONTROL • FREE FLIGHT



The nose weight replaces the prop washer. You can try different weights easily at the field to get the proper balance for your plane, with or without a spinner.

A balanced plane flys better, and is easier to handle. A must for every flying box.

FITS ENGINES ¼" DIAM. AND UP

NYLON COATED STEEL CABLE



Our **Nylon Coated Steel Cable** works great for wheel brake hook ups, retract landing gear steering, and scale plane rigging cable.



DZUS FASTENER WITH WIRE LOOP

Dzus Fasteners work great for hatch cover and cowls. Comes complete with wire loop. See your local dealer.

PRA20105	PRATHER #103 1/2 OZ. NOSE WT.	1.69	1.55
PRA20110	PRATHER #104 1 OZ. NOSE WT.	1.79	1.65
PRA20115	PRATHER #105 1 1/2 OZ. NOSE WT	1.89	1.75
PRA20120	PRATHER #106 2 OZ. NOSE WT.	1.99	1.90
PRA20260	PRATHER #107 6 OZ. STICK-ON WT	1.98	1.90
PRA21180	PRATHER #118 FLUSH CAMLOC	1.29	1.25
PRA21490	PRATHER #149 DZUS FASTENERS	1.29	1.25
PRA21500	PRATHER #150 NYLON COATED CABL	.98	.95

PROCTOR

HARDWARE

WE MANUFACTURE AND STOCK A LARGE EXPANDING LINE OF SCALE MODEL AIRCRAFT HARDWARE.

SINCE MANY OR OUR FITTINGS AND ACCESSORIES ARE COMPATIBLE WITH BOATS, WE HAVE A LISTING OF SHIPS FITTINGS AS WELL.

WE ORIGINALLY MANUFACTURED THIS HARDWARE FOR OUR OWN SCALE KITS. DEMAND FOR THESE ITEMS HOWEVER FROM OTHER BUILDERS LED TO OUR PACKIGING THE VARIOUS ITEMS FOR SALE.

1/16 DIA. HOLES ARE STANDARD IN MOST OF OUR FITTINGS AND WE WILL ACCEPT OUR SMALL SCREWS AND BOLTS. HOLES MAY BE DRILLED OUT FOR LARGER SIZES AS REQUIRED.

MOST FITTINGS ARE BRASS, A FEW ARE ALUMINUM AND SOME ARE MADE FROM PHENOLIC SHEET.

ALL OF OUR FITTINGS, TURNBUCKLES, PULLEYS ETC., ARE FUNTIONAL AND RIGGING THE WINGS WITH CABLE IS DONE IN THE IDENTICAL MANNER AS ON A FULL SCALE SHIP.

THE VARIOUS WAYS THAT OUR FITTING MAY BE USED ARE TOO NUMEROUS TO DESCRIBE, WE DO HOWEVER SHOW SOME APPLICATIONS ON THESE SHEETS.

SOME OF OUR PARTS SERVE A DUAL PURPOSE. FOR INSTANCE, OUR AIRCRAFT INSTRUMENT HOUSINGS ARE ALSO USED FOR SHIP PORT HOLES, AND THE TURNBUCKLES ARE USED FOR BOTH AIRCRAFT AND SHIP RIGGING ETC.

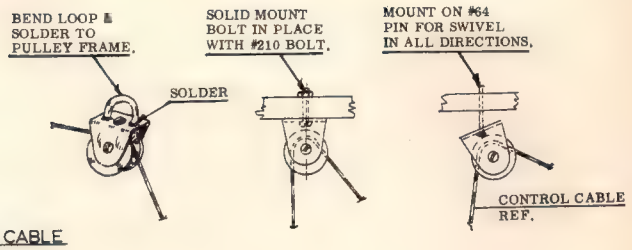
STRUT FITTINGS AND CABLE ANCHOR FITTING MAY BE USED INDIVIDUALY OR STACKED UP AS REQUIRED.

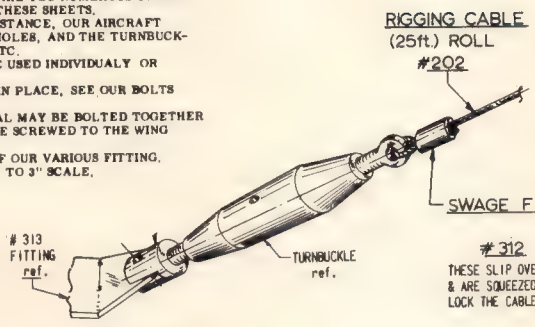
ALL FITTINGS MAY BE EITHER BOLTED OR SCREWED IN PLACE, SEE OUR BOLTS AND SCREWS.

A UNIQUE FEATURE OF THE FITTINGS IS THAT SEVERAL MAY BE BOLTED TOGETHER TO MAKE A COMPLICATED ASSY. , WHICH IN TURN CAN BE SCREWED TO THE WING AFTER COVERING IS COMPLETE.

OUR CLEVIS END TURNBUCKLE FIT OVER THE ENDS OF OUR VARIOUS FITTING. THE BULK OF OUR AIRCRAFT FITTINGS ARE FOR 1 1/2 TO 3" SCALE.

SUGGESTED METHODS OF MOUNTING.

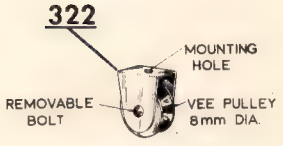




#312
THESE SLIP OVER THE CABLE & ARE SQUEEZED FLAT TO LOCK THE CABLE IN PLACE.

THE CLEVIS ENDS SLIP OVER THE #313 STRUT FITTINGS. USED WITH TURNBUCKLES # 2,3,5, 6,& 7.

PULLEY ASSYS. USED FOR CONTROLS ON AIRCRAFT & BOATS.



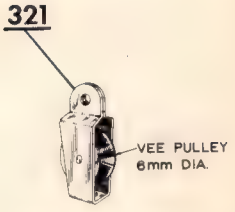
BRASS PULLEY ASSY.

WORKING TURNBUCKLES

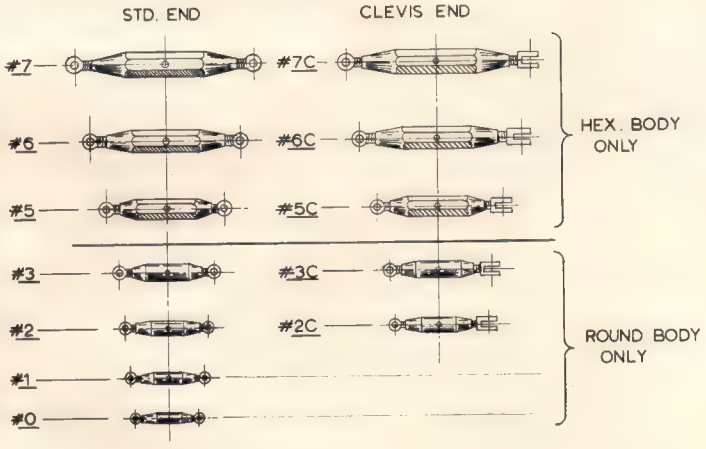
(SHOWN APPROX. 2/3 SIZE)

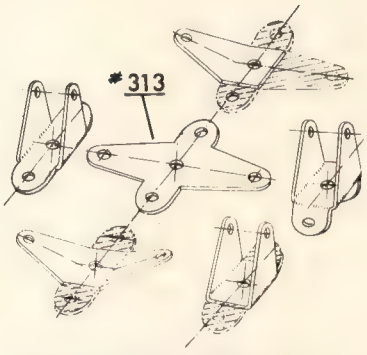
- PRECISION MANUFACTURE
- LEFT & RIGHT HAND THREADS
- BRIGHT BRASS FINISH
- FOR SCALE AIRCRAFT & BOATS



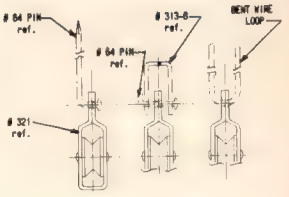


BRASS PULLEY ASSY.

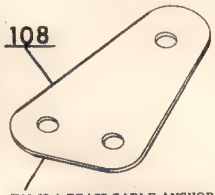




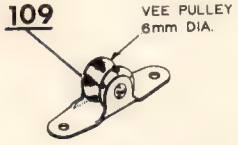
THIS IS OUR #313 UNIVERSAL FITTING THAT MAY BE TRIMMED & FORMED TO 5 DIFFERENT SHAPES AS SHOWN. IT CAN BE USED TO FASTEN THE STRUT TO THE WING & TO ANCHOR THE STRUT CROSS BRACE CABLES ETC.



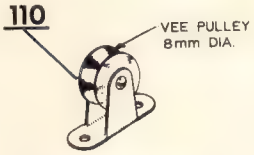
SUGGESTED METHODS FOR MOUNTING #321



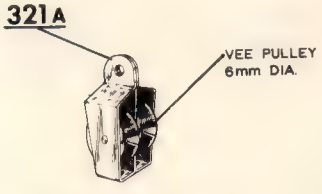
#108 IS A BRASS CABLE ANCHOR FITTING USUALLY USED AT THE INBOARD END OF THE WING TO HOLDTWO CABLES. FORM TO SUIT.



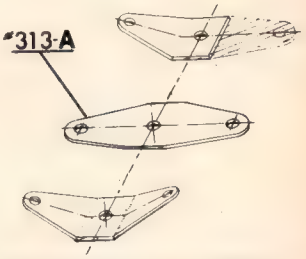
BRASS PULLEY ASSY.
FASTEN IN PLACE WITH OUR #210 BOLT OR 0x1/4 SCREWS.



BRASS PULLEY ASSY.



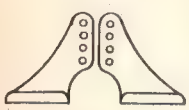
BRASS DOUBLE PULLEY ASSY.

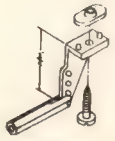


FITTING #313A USED AS A CABLE ANCHOR AT STRUT LOCATIONS. MAY BE FORMED AND TRIMMED TO SUIT.

PRC20000	#0 TURNBUCKLE (4)	2.41	2.30
PRC20005	#1 TURNBUCKLE (4)	2.51	2.40
PRC20010	#2 TURNBUCKLE (4)	2.64	2.50
PRC20015	#3 TURNBUCKLE (3)	2.21	2.10
PRC20020	#5 TURNBUCKLE (3)	2.41	2.30
PRC20025	#6 TURNBUCKLE (3)	2.61	2.50
PRC20030	#7 TURNBUCKLE (3)	2.81	2.65
PRC20050	#2C TURNBUCKLE (4)	2.77	2.65
PRC20055	#3C TURNBUCKLE (3)	2.31	2.20
PRC20060	#5C TURNBUCKLE (3)	2.51	2.40
PRC20065	#6C TURNBUCKLE (3)	2.70	2.55
PRC20070	#7C TURNBUCKLE (3)	2.91	2.75
PRC20140	#108 CABLE ANCHOR FITTING (4)	1.20	1.15
PRC20145	#109 PULLEY ASSEMBLY	1.30	1.25
PRC20150	#110 PULLEY ASSEMBLY	1.30	1.25
PRC20205	#201 COCKPIT TRIM	.95	.90
PRC20206	#201A COCKPIT TRIM	1.05	1.00
PRC20210	#202 RIGGING CABLE-25 FT	2.65	2.50
PRC20215	#203 CONTROL CABLE-25 FT	2.65	2.50
PRC20250	#210 STRUT BOLT & NUT (4)	.75	.70
PRC20320	#312 SWAGE FITTING (20)	1.15	1.10
PRC20325	#313 STRUT FITTING (4)	1.20	1.15
PRC20326	#313A CABLE ANCHOR FITTING (4)	1.00	.95
PRC20350	#321 PULLEY ASSEMBLY	1.35	1.30
PRC20351	#321A DOUBLE PULLEY ASSEMBLY	1.55	1.45
PRC20360	#322 PULLEY ASSEMBLY	1.05	1.00

ACCESSORIES

STANDARD CONTROL HORNS
pair

Stock No. 01

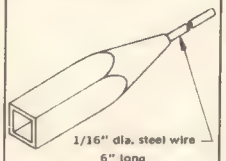
MINI CONTROL HORNS
pair

Stock No. 03

EASY ACTION WHEEL BRAKES
pair

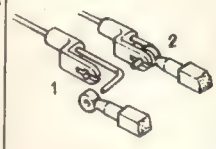
Stock No. 04

AILERON LINKS
pair


Stock No. 05

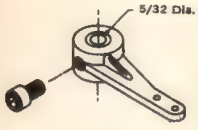
PUSH ROD ENDS
pair


Stock No. 06

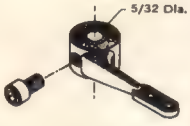
PUSH ROD RETAINERS
4 pieces


Stock No. 07

PUSH ROD EXITS
4 pieces
Molded in Colors
Red
White
Blue
Yellow
Green
Black
Stock No. 08

STEERING ARM
each


Stock No. 09

STEERING ARM (SHOCK ABSORBING)
each


Stock No. 10

MISSING LINK WITH HARDWARE
each

Stock No. 11

MISSING LINK WITHOUT HARDWARE
2 pieces

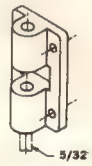
Stock No. 12

SUPER-FLEX NYLON HINGE
5 pieces

Stock No. 21

WING BOLTS 1/4-20
pair

1-1/2" long
Stock No. 22

NOSE GEAR BRACKET
each


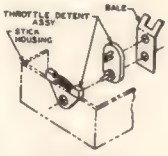
Stock No. 25

STICK TIPS (KRAFT)
pair

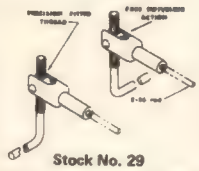
Stock No. 26

ANTENNA EXIT
4 pieces

Stock No. 27

THROTTLE DETENT (KRAFT)
each


Stock No. 28

AILERON SWIVEL LINKS WITH THREADED HORNS
pair

Stock No. 29

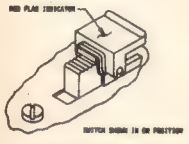
AILERON SWIVEL LINKS WITH NON-THREADED HORNS
pair


Stock No. 34

AILERON SWIVEL LINKS WITHOUT HORNS
pair
These are the same as No. 29 and can be used on horns that have No. 4-40 thread.
Stock No. 69
These are the same as No. 34 and can be used on horns that are 3/32" dia.
Stock No. 39

SAFETY BACK RAZOR BLADES
8 pieces

Stock No. 30

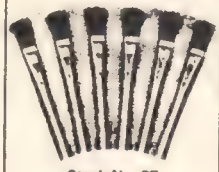
TRANSMITTER SWITCH LOCK
each

Stock No. 32

WING BOLTS 1/4-20 OVAL HEAD
pair

1-1/2" long
Stock No. 35

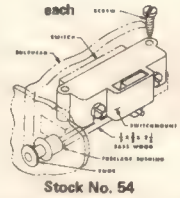
WING BOLTS 10-24 OVAL HEAD
pair

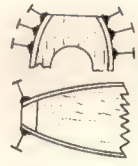
1" long
Stock No. 36

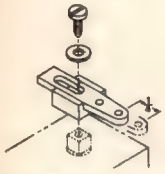
EPOXY BRUSHES
6 pieces

Stock No. 37

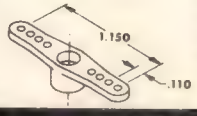
WING CUSHION TAPE
1/8 x 1/4 x 36.00"
1 yard

Stock No. 38

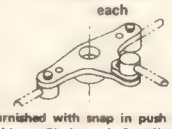
INTERNAL SWITCH MOUNT
each

Stock No. 54

PIN CLAMP
28 pieces

Stock No. 55

ADJUSTABLE SERVO ARM
each

Stock No. 33 KPS-9
Stock No. 67 KPS-10
Stock No. 44 KPS-11
Stock No. 45 KPS-12
Stock No. 46 KPS-14 & 15
Stock No. 64 KPS-14 & 15-11
Stock No. 48 D & R
Stock No. 56 EK
Stock No. 47 World Eng.

SERVO OUTPUT ARMS
2 pieces


Stock No. 31 KPS-9
Stock No. 57 KPS-10
Stock No. 58 KPS-11
Stock No. 59 KPS-12
Stock No. 60 KPS-14 & 15
Stock No. 63 KPS-14 & 15-11
Stock No. 62 D & R
Stock No. 61 World Eng.
Stock No. 66 EK
Stock No. 74 Dunham D-5

RETRACT ARM
each

Furnished with snap in push rod holders. Choice of 2 different throws.
Outer holes 1-1/16" throw.
Inner holes 13/16" throw.
Stk. No. 41-for KPS-10 servo.
Stk. No. 42-for World Eng. servo.
Stk. No. 71-for KPS 14 & 15 II

THROTTLE OVERRIDE DEVICE
each

Stock No. 52 KPS 14 & 15
Stock No. 65 KPS 14 & 15-11
Stock No. 19 World Eng.

QUICK MOUNT SERVO TAPE
1 yard
1/8" x 1/2" wide
Stock No. 14

4 feet
1/16" x 1/2" wide
Stock No. 75

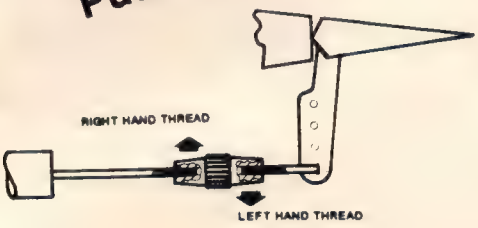
ROCKET CITY

RCS20004	ROCKET CITY #04 WHEEL BRAKES	3.00	2.80
RCS20026	ROCKET CITY #26 STICK TIPS KRA	.59	.55
RCS20027	ROCKET CITY #27 ANTENNA EXIT	.59	.55
RCS20028	ROCKET CITY #28 THROTLE DETENT	1.29	1.15
RCS20030	ROCKET CITY #30 RAZOR BLADES	.79	.75
RCS20032	ROCKET CITY #32 SWITCH LOCK TX	1.59	1.45
RCS20037	ROCKET CITY #37 EPOXY BRUSHES	.98	.95
RCS20038	ROCKET CITY #38 WING TAPE	.59	.55
RCS20054	ROCKET CITY #54 SWITCH MOUNT	1.29	1.15
RCS20055	ROCKET CITY #55 PIN CLAMP	.59	.55
RCS23006	ROCKET CITY #06 PUSH ROD ENDS	.79	.75
RCS23007	ROCKET CITY #07 RETAINERS	.59	.55
RCS23008	ROCKET CITY #08 PUSH ROD EXITS	.59	.55
RCS24021	ROCKET CITY #21 NYLON HINGE	.59	.55
RCS25011	ROCKET CITY #11 MISSING LINK	.79	.75
RCS25012	ROCKET CITY #12 LINK LESS HDWE	.79	.75
RCS26009	ROCKET CITY #09 STEERING ARM	.79	.75
RCS26010	ROCKET CITY #10 STEERING ARM	.79	.75
RCS27022	ROCKET CITY #22 BOLTS 1/4-20	.79	.75
RCS27035	ROCKET CITY #35 BOLTS 1/4-20 O	.79	.75
RCS27036	ROCKET CITY #36 BOLTS 10-24 OV	.59	.55
RCS28014	ROCKET CITY #14 SERVO TAPE 1/8	.79	.75
RCS28019	ROCKET CITY #19 OVERRIDE WORLD	.98	.95
RCS28031	ROCKET CITY #31 SERVO ARMS KRA	.98	.95
RCS28042	ROCKET CITY #42 ARM WORLD	1.29	1.20
RCS28044	ROCKET CITY #44 ARM KPS-11	.98	.95
RCS28045	ROCKET CITY #45 ARM KPS-12	.98	.95
RCS28046	ROCKET CITY #46 ARM KPS-14&15	.98	.95
RCS28047	ROCKET CITY #47 ARM WORLD ENG.	.98	.95
RCS28052	ROCKET CITY #52 OVRD KPS-14&15	.98	.95
RCS28056	ROCKET CITY #56 ARM EK	.98	.95
RCS28060	ROCKET CITY #60 ARMS KPS 14&15	.98	.95
RCS28061	ROCKET CITY #61 ARMS WORLD ENG	.98	.95
RCS28063	RCKT CTY #63 ARMS KPS 14&15 II	.98	.95
RCS28064	ROCK CTY #64 ARM KPS 14&15 II	.98	.95
RCS28065	RKT CTY #65 OVRD KPS 14&15II	.98	.95
RCS28066	ROCKET CITY #66 ARMS EK	.98	.95
RCS28071	ROCK CTY #71 ARM KPS 14&15 II	1.29	1.25
RCS28075	ROCKET CITY #75 SERV TAPE 1/16	.79	.75
RCS29001	ROCKET CITY #01 STANDARD HORNS	.59	.55
RCS29003	ROCKET CITY #03 MINI HORNS	.79	.75
RCS29005	ROCKET CITY #05 AILERON LINKS	.79	.75
RCS29025	ROCKET CITY #25 BRACKET NOSE	.59	.55
RCS29029	ROCKET CITY #29 SWIVEL LINKS	1.59	1.45
RCS29034	ROCKET CITY #34 AIL LINKS W/TH	1.59	1.45
RCS29039	ROCKET CITY #39 LINKS W/O HORN	1.29	1.20
RCS29069	ROCKET CITY #69 SWIV W/O HORNS	.98	.95

ROBART

ROB24215	ROBART HINGE POINTS (15)	1.95	1.75
ROB24315	ROBART MINI HINGE POINTS (15)	1.79	1.60
ROB24415	ROBART HINGE POINT FLATS (15)	1.49	1.45
ROB24504	ROBART HORNY HINGE POINTS (4)	.79	.75
ROB24600	ROBART PUSHROD TURNBUCKLE PT69	.69	.65
ROB24610	ROBART WATERPROOF BUSHING	2.49	2.25
ROB24704	ROBART SERVO ARM KPS 14,15	1.49	1.45
ROB24705	ROBART SERVO ARM KPS 14,15 II	1.49	1.45
ROB24706	ROBART SERVO ARM WORLD,FP6&7	1.49	1.45
ROB24707	ROBART SERVO ARM MRC	1.49	1.45
ROB24708	ROBART SERVO ARM EK	1.49	1.45
ROB24709	ROBART SERVO ARM CIRRUS	1.49	1.45

NEW Pushrod Turnbuckle



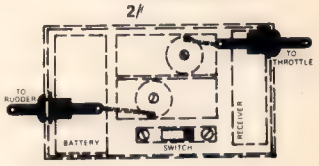
2

- THE MICROMETER PUSHROD ADJUSTMENT
- TURN CLOCKWISE TO SHORTEN
- TURN COUNTER CLOCKWISE TO EXTEND
- NO TAKE APART REQUIRED
- SELF LOCKING NYLON
- 'Z' BEND

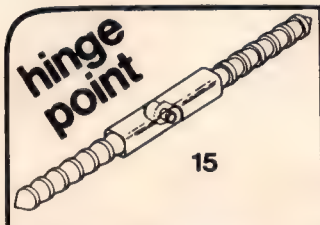
Water Tight Output Bushing



- WATER TIGHT OUTPUT FOR RADIO BOX



hinge point



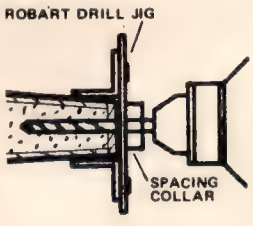
15

- EASIEST TO INSTALL
- PULL-OUT PROOF
- ENDS ALL HINGING PROBLEMS

1–MARKING / LINE UP SECTIONS PENCIL MARK TRANSFERS TO BOTH SECTIONS



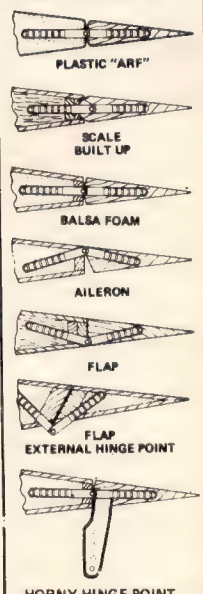
2–DRILLING / DRILL 1/8" HOLE TO DESIRED DEPTH



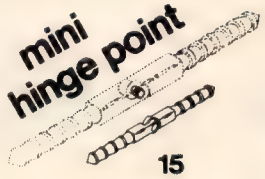
3–ASSEMBLY / COAT POINTS WITH WHITE GLUE OR QUICK EPOXY. ASSEMBLE STATIONARY SIDES FIRST AND ALLOW TO DRY. THEN ASSEMBLE MOVABLE SURFACES.



TYPICAL INSTALLATIONS



mini hinge point



15

1/2 THE SIZE OF A HINGE POINT. EASY TO INSTALL. DRILL 5/64" HOLE AND INSERT WITH GLUE.

horny hinge point



4

A HINGE POINT WITH A HORN. EASIEST TO INSTALL. DRILL 1/8" HOLE AND INSERT WITH GLUE.

hinge point drill jig



THE HINGE POINT DRILL JIG AUTOMATICALLY FINDS THE CENTER AND GUIDES THE DRILL TO INSURE PERFECT HINGING

hinge point flats



GLUE PROOF INSTALLATION
PRICED RIGHT

15

robart

P.O. BOX 122 WHEATON, ILL. 60187

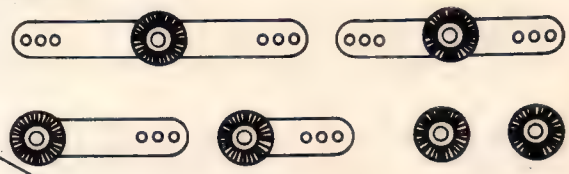
NEW Servo Trim Arm

Another Robart Exclusive



- TRIM SERVO WITHOUT TAKING IT APART
- MICRO FINE TRIM ADJUSTMENT AT SERVO
- 4 ARMS 2 ADAPTORS

KPS 14 & 15 Red
KPS 14–II & 15–II White
D&R W.E. FP 6&7 Black
MRC Brown
EK Green
Cirrus Grey



USES: 1–TRIM SERVO CENTER WITH NO ELECTRICAL ADJUSTMENTS
2–OFFSET FOR AILERON OR ELEVATOR DIFFERENTIAL
3–ENGINE SERVO TRIM

SU-PR-LINE

SU-PR-LINE PRODUCTS
PLAINFIELD, ILL. 60544

INSIST ON THESE PUSH RODS BY NAME

SU-PR-ROD™ THE 44" FLEXIBLE PUSH ROD

- WITH MORE "PUSHABILITY"
- COMPLETE WITH ALL HARDWARE
- 44 INCHES ASSEMBLED LENGTH
- SMOOTH SURFACES — NO RIBBING TO ACCUMULATE OIL AND DIRT
- SATISFIES ALL PUSH ROD REQUIREMENTS DOWN TO A 3½" RADIUS



HARDWARE INCLUDED — 1—Su-Pr-KLEVIS • 1—Su-Pr-KEEPER • 1—NYRODapter
8" ROD WITH 2-56 THREADED END
CAT. S-ROD

PRORODTM THE RIGID PUSH ROD

- TWO COMPLETE SETS WITH ALL HARDWARE
- SELECTED PREDRILLED HARDWOOD RODS
- ASSEMBLES IN MINUTES
- NO GLUING REQUIRED
- 36 INCHES LONG, ASSEMBLED LENGTH



HARDWARE INCLUDED — 2—12" ProRODapters • 2—4" NYRODapters
2—Su-Pr-KEEPERS • 2—Su-Pr-KLEVISES
2—SLOTTED COUPLERS
2 PER PKG.
CAT. P-ROD

NYROD® THE ORIGINAL Flexible PUSH ROD

REVOLUTIONIZED PUSH ROD SYSTEMS 10 YEARS AGO

- COMPLETE WITH ALL HARDWARE
- IDEALLY SUITED FOR ANY PUSH ROD ACTION RUDDERS, ELEVATORS, AILERONS, THROTTLE C BOATS, SEA PLANES . . . YOUR IMAGINATION
- 34 INCHES LONG, ASSEMBLED LENGTH

PUSH ROD FAVORITE FOR NEARLY A DECADE



HARDWARE INCLUDED — 1—NYRODapter • 1—Su-Pr-KEEPER
1—Su-Pr-KLEVIS • 1—2-56STUD
1—2-56 JAM NUT
8" ROD WITH 2-56 THREADED END
CAT. NYROD

MASTEROD® THE Flexible Cable PUSH ROD

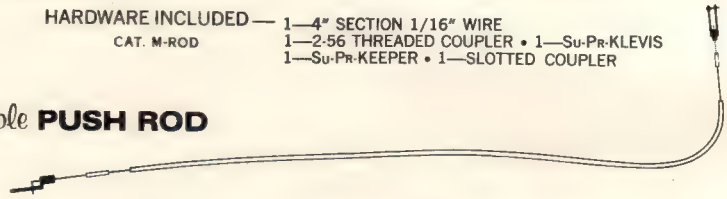
- COMPLETE WITH ALL HARDWARE
- CONTAINS FLEXIBLE CABLE AND TUBING
- SATISFIES ALL PUSH ROD REQUIREMENTS TO **TWO INCH RADIUS**
- FLEXIBLE AND POSITIVE
- 36 INCHES LONG, ASSEMBLED LENGTH



HARDWARE INCLUDED — 1—4" SECTION 1/16" WIRE
1—2-56 THREADED COUPLER • 1—Su-Pr-KLEVIS
1—Su-Pr-KEEPER • 1—SLOTTED COUPLER
CAT. M-ROD

MASTEROD®-XF THE Extra Flexible Cable PUSH ROD

- COMPLETE WITH ALL HARDWARE
- CONTAINS FLEXIBLE CABLE AND TUBING
- SATISFIES ALL PUSH ROD REQUIREMENTS TO **½" INCH RADIUS**
- FLEXIBLE AND POSITIVE
- 36 INCHES LONG, ASSEMBLED LENGTH



HARDWARE INCLUDED — 1—4" SECTION 1/16" WIRE
1—2-56 THREADED COUPLER • 1—Su-Pr-KLEVIS
1—Su-Pr-KEEPER • 1—BRASS COUPLER
CAT. XF-ROD

THREADED BRASS COUPLERS



3 for 49¢

DESIGNED FOR 1/16" WIRE AND CABLE

- 1-1/4" LONG
- 2-56 THREADS
- 1/16" DIA. HOLE

3 PER PKG. BC

Su-Pr-KLEVIS with 2-56 STUDS and JAM NUT



- NO TOOLS REQUIRED TO PRY APART
- DOESN'T OPEN UNDER VIBRATION
- UNIQUE DESIGN RESISTS PIN BREAKAGE

THE PROVEN NYLON KLEVIS

2 PER PKG. KVS

Su-Pr-KEEPER

INSTALLS WITH A SNAP AFTER ALL LINKAGES HAVE BEEN ASSEMBLED



THE IDEAL KEEPER FOR 1/16" WIRE FITTINGS

- QUICK CONNECT
- QUICK DISCONNECT

3 PER PKG. KPR

NYRODapters

THE THREADED ROD FOR ALL SERVO OUTPUT ARMS



- 1/16" PRECISION GROUND ROD
- 4" LONG, 2-56 THREADS

4 PER PKG. NY

STUDS and NUTS



4 EACH 35¢

2-56 THREADS
CUSTOM FITTINGS FOR NYRODS and Su-Pr-RODS

4 PER PKG. SN

NYRODapters STUDS & NUTS



FITS NYRODS and Su-Pr-RODS

NSN

ProRODapters and COUPLERS



BOTH ENDS THREADED
12 INCHES LONG
2-56 THREADS

IDEAL FOR SHORT COUPLINGS, GEAR, FLAPS, STRIP AILERONS, THROTTLE, ETC.

2 PER PKG. PR

SPL23101	SU-PR-LINE M-ROD MASTEROD	1.69	1.60
SPL23102	SU-PR-LINE XF-ROD MASTEROD-XF	1.69	1.60
SPL23201	SU-PR-LINE 30 IN NYROD	1.59	1.50
SPL23301	SU-PR-LINE P-ROD PROROD	1.98	1.85
SPL23401	SU-PR-LINE S-ROD SU-PR-ROD	1.69	1.60
SPL25901	SU-PR-LINE PR PRORODAPTORS	.59	.55
SPL25903	SU-PR-LINE SN STUD&NUTS 256	.49	.45
SPL25904	SU-PR-LINE KVS SU-PR-KLEVIS	.79	.75
SPL25905	SU-PR-LINE KPR SU-PR-KEEPRS	.69	.65
SPL25906	SU-PR-LINE NY NYRODAPTORS	.59	.55
SPL25907	SU-PR-LINE NSN NYRODSTUDNUT	.49	.45
SPL25909	SU-PR-LINE BC COUPLERS 256	.59	.55

SONIC-TRONICS

STR20230	SONICTRONICS	#230 SEATING 1/16	.75	.70
STR20231	SONICTRONICS	#231 SEATING 3/8	.85	.80
STR20232	SONICTRONICS	#232 SEATING 1/4	.80	.75
STR20235	SONICTRONICS	#235 MOUNTING 1/16	.90	.85
STR20236	SONICTRONICS	#236 MOUNTING 1/8	.95	.90
STR20238	SONICTRONICS	#238 SHRINK TAPE	1.45	1.35
STR20240	SONICTRONICS	#240 PROTEC-A-PAC	.99	.95
STR20255	SONICTRONICS	#255 TAPE 1 1/2	.95	.90
STR20256	SONICTRONICS	#256 TAPE 3 IN.	1.49	1.40
STR20257	SONICTRONICS	#257 TAPE 6 IN.	1.99	1.90
STR20260	SONICTRONICS	#260 PLUG CADDIE	1.19	1.10
STR20270	SONICTRONICS	#270 T PINS LARGE	.75	.70
STR20271	SONICTRONICS	#271 T PINS SMALL	.75	.70
STR20281	SONICTRONICS	#281 72/75 FLAGS	.99	.95
STR28245	SONICTRONICS	#245 GROMMETS SM.	.60	.55
STR28246	SONICTRONICS	#246 GROMMETS MED	.60	.55
STR54252	SONICTRONICS	#252 BIG SHOT 8OZ	3.29	2.95
STR54253	SONICTRONICS	#253 KLEEN-FIL	1.85	1.65
STR55220	SONICTRONICS	#220 SURGICAL SM.	.65	.60
STR55221	SONICTRONICS	#221 SURGICAL LG.	.75	.70
STR55222	SONICTRONICS	#222 SURGICAL SUP	.85	.80
STR55225	SONICTRONICS	#225 SILICONE SM.	.80	.75
STR55226	SONICTRONICS	#226 SILICONE LG.	.90	.85
STR55251	SONICTRONICS	#251 FUELLINE KIT	1.79	1.60
STR55326	SONICTRONICS	#226R 30 ROLL LG	11.50	10.25

BIG SHOT

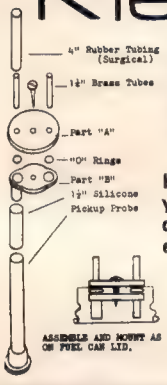


The 8 oz. Fuel Bulb

No. 252

Adapts to all fuel cans, Pints, Quarts, or Gallons.

Kleen-Fil



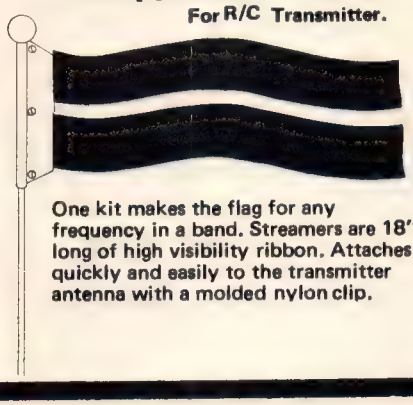
THE FILTERED FUEL PROBE ASSEMBLY – EVERY FUEL CAN NEEDS IT!

Kleen-Fil keeps dirt out of your fuel and the can stays closed at all times to prevent evaporation and spilling.

No. 253

FREQUENCY FLAG

For R/C Transmitter.



One kit makes the flag for any frequency in a band. Streamers are 18" long of high visibility ribbon. Attaches quickly and easily to the transmitter antenna with a molded nylon clip.

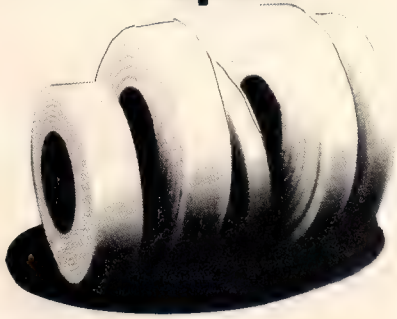
GLOW-PLUG "CADDIE"



No. 260

Keeps up to 9 glow plugs organized and protected. Comes equipped with instant mount for quick attachment to field box.

Modeling Tapes



White Vinyl Seating Tape

1/16" x 1/4" x 36"	No. 230
1/8" x 3/8" x 36"	No. 231
1/8" x 1/4" x 36"	No. 232

White Vinyl Mounting Tape

1/16" x 1/2" x 36"	No. 235
1/8" x 1/2" x 36"	No. 236

Heat Shrink Tape

3/8" x 20 ft.	No. 238

Fiberglass Tape

1 1/2" x 60"	No. 255
3" x 60"	No. 256
6" x 60"	No. 257

Fuel Line



Surgical Fuel Line

Small, 2 ft. per pkg.	No. 220
Large, 2 ft. per pkg.	No. 221
Super, 2 ft. per pkg.	No. 222

Silicone Fuel Line

Small, 2 ft. per pkg.	No. 225
Large, 2 ft. per pkg.	No. 226
30 ft. roll, large	No. 226R

Special Silicone Fuel Line Kit

3 ft. of 5/32" ID Tubing & probe	No. 251

RUBBER SERVO GROMMETS



Small – No. 245

Large – No. 246

NifTy Pins

Made from high strength chrome plated steel in a new rectangle shape that resembles a carpenters cut nail and reduces splitting with increased holding power. Approx. 40 pins per package.



Large 1½"length
No. 270

Small 1¼" length
No. 271

Protec-A-Pac



A complete kit of material to protect your radio from vibration and impact damage. Contains one square foot of special air cell and foam material. Enough for three or more installations.
No. 240

SULLIVAN

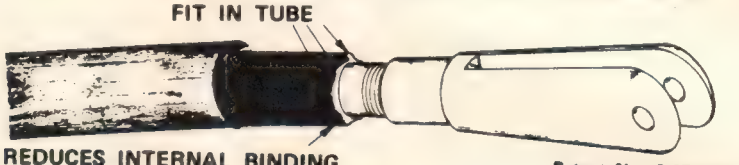
GOLD-N-PUSH RODS . . . THE ORIGINAL TEMPERATURE STABILIZED RODS

GOLD-N-PUSH ROD KITS (Plastic Type)	
GRF 36	Flexible: 36" Long — 2 Sets
GRF 48	Flexible: 48" Long — 2 Sets

Patented No-Clog Feature

These are the push rods that beat the clog, that annoying accumulation of dust and oil. The patented splines on the inner rod cut right through that mess, eliminating the binding so common to other smooth push rods. And don't worry about elongation, either. Gold-n-Push Rods are the original temperature compensated push rods. We put two push rods in every package to keep packaging and shipping costs down. Why should you pay for unnecessary packaging material? Pylon Brand always finds ways to save you money.

ONLY 8 CONTACT POINTS FOR FRICTIONLESS FIT IN TUBE



REDUCES INTERNAL BINDING CAUSED BY OIL & DUST

Patent No. 3,657,942

Gold-N-Push Rods reduce elongation by 75% over nylon push rods now in use. Elongation is a problem to the R/C Flyer, because he must make adjustments in his controls at various temperature changes.

Gold-N-Push Rods are 75% more stable at temperatures up to 180°, which greatly exceeds conditions that any model airplane would encounter.

Gold-N-Push Rods are golden-coated to avoid confusion with nylon push rods, and also are packaged in 36" and 48" straight lengths in plastic bags.

SUL23036	SULLIVAN GOLD-N-ROD(FLEX)GRF36	1.60	1.50
SUL23048	SULLIVAN GOLD-N-ROD(FLEX)GRF48	1.70	1.60

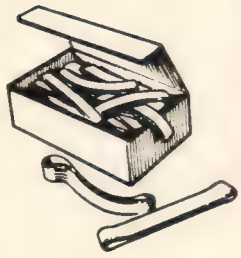
TOWER HOBBIES

RUBBER BANDS

We carry three sizes of quality rubber bands packed in 1/4 pound packages for your convenience.

Size #64—for .35-.78 power planes
Size #62—for .10-.35 power planes
Size #32—for .09 and smaller planes

These are perfect for securing your wing or dural landing gear.





NYLON BOLTS

We carry the popular size 1/4-20 thread nylon bolt in the useful 2" length size. They come packaged in either the convenient two pack or in the economical ten pack. Typical strength of this type nylon bolt is 330 pounds tensile, 330 pounds shear, and about 17 inch-ounces of torque. One bolt is plenty to hold your wing on for most .40 size ships, while 2 will work on most .60's.

TOW20032	TOWER RUBBER BANDS 1/4LB #32	1.25	1.10
TOW20062	TOWER RUBBER BANDS 1/4LB #62	1.25	1.10
TOW20064	TOWER RUBBER BANDS 1/4LB #64	1.25	1.10

TOW27002	TOWER NYLON BOLTS 1/4X20X2 (2)	.80	.70
TOW27010	TOWER NYLON BOLTS 1/4X20X2(10)	1.75	1.65

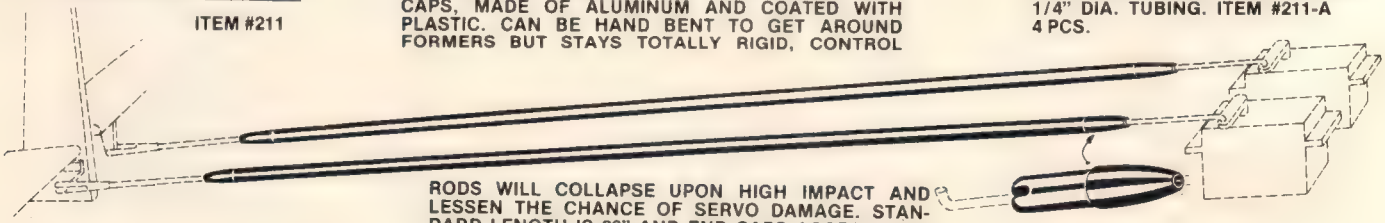
WING MFG. CO.

RC CONTROL RODS

ITEM #211

LIGHT-WEIGHT CONTROL ROD WITH MOLDED END CAPS, MADE OF ALUMINUM AND COATED WITH PLASTIC. CAN BE HAND BENT TO GET AROUND FORMERS BUT STAYS TOTALLY RIGID, CONTROL RODS WILL COLLAPSE UPON HIGH IMPACT AND LESSEN THE CHANCE OF SERVO DAMAGE. STANDARD LENGTH IS 23" AND END CAPS ACCEPT 1/16" DIA. THREADED OR UNTHREADED END RODS.

MOLDED END CAPS AVAILABLE SEPARATELY AND WILL ACCEPT 1/4" DIA. TUBING. ITEM #211-A 4 PCS.



6 pieces

WIN20211	WING CONTROL RODS #211	3.39	3.25
WIN20212	WING CONTROL ROD END CAP #211A	1.15	1.10

Adhesives

Adhesives, or "glues", are the stuff that hold our models together in the air. These substances are known for the fact that they bond, or cause the various parts to adhere to each other, hence the name. The types of materials that can be joined, the strength of the joint (also called the "bond"), and the working characteristics vary because of the chemical properties of each type of adhesive. There are six basic types of adhesives used in R/C Modeling: the acetates, the cyanoacrylates, the epoxies, the "white" glues, contact cements, and the silicon adhesives.

Acetates: These are the very familiar "model airplane" glues. Due to the solvents in the glue, which evaporate while drying, they cast off a very strong odor. These glues are fine for light models, but with the strength requirements of our present models, they are not stromg enough. They work finely for joints that do not carry a lot of strength, but which must be sanded or carved. Because of the solvents which evaporate, they must be used in a well-ventilated area away from any fire or flame, as they are very flammable, and breathing of the vapors can cause severe illness. (Ambroid)

Cyanoacrylates: These are the "hot", or "instant" glues. They are great for bonding almost anything together in a short time. They produce a bond with unbelievable strength, in such a ridiculously short time that they were regarded with suspicion when they were first introduced into the hobby field. Usage with excellent results broke the barrier of reluctant modelers, and they are now considered a vital part of any modeler's adhesive supplies.

The time required for these glues to harden, or "set", varies with the formula, but we usually find that they take either about ten or thirty seconds. The ten-second variety is the most popular, but care should be taken when these glues are used. They are of a very low viscosity, and as such, should be used only when the joint is very tight. A gap is impossible for the glue to fill, alone. A filler such as micro-balloons or baking powder put into the gap before the glue is applied will allow the glue to bond in the gap. When you make a normal joint, put the parts together first, and then apply a drop at the edges of the joint. The glue will run into the joint and form the bond.

The thirty-second variety is used where the rapid set time is not needed, or desired. It is just as strong, and has some gap-filling ability as its viscosity is quite high . . . about the same as thick pancake syrup. With this type, you have a little time during which you can adjust the parts to get the proper fit.

Because both of these adhesives have an affinity for bonding with human skin, you should be extra careful when using these products. The ten-second variety will bond skin instantly, and you'll have some trouble separating the affected members. The instructions for these adhesives contain the procedures for proper use, and what to do if you accidentally bond yourself to yourself. These adhesives are not recommended for use by children without very close adult supervision! With proper use and care, however, they are very safe to use, and are among the strongest adhesives you can find. (Hot Stuff, Zap, X-30).

Epoxies: Epoxies are two-part glues that feature various setting times with incredible strength. Anyplace you need a bond that is subject to high stress, fuel, and general abuse (such as the tail feathers of your bird), the epoxy is your glue. The set times are usually five-minutes, fifteen-minutes, and forty-five-minutes. The longer the setting time, the stronger the bond, as the glue is better able to "grab" onto the wood.

Typically, they are two-part adhesives, although some are now coming advertised as "one-part, epoxy-based adhesive". One part is the epoxy-base resin, and the other is the hardner. They are mixed in the proportions recommended by the manufacturer, and applied to the pieces being joined. Clamp the pieces in place, and wait for the glue to cure. When it is hardened, you'll hae a virtually indestructable joint (although the wood adjacent to the joint may fail under stress . . . a good reason for as large a bonding surface as possible).

(Continued on page 88)

AMBROID



AMBROID Regular Cement is the model builder's standby for all woods, leathers, canvass, metals, and fabrics. It is waterproof and hot fuel proof. DO NOT USE ON PLASTIC OR FOAM.

AMB31104 AMBROID REG. CEMENT 4 OZ. 1.25 1.20

Slow drying penetration equals strength.

Why is it that slow drying cements are stronger? As we explained, all cements dry by solvent evaporation. As the solvent is evaporated the cement penetrating the wood pores, forms the bond that will hold the pieces together. Once the solvent has stopped evaporating, wood pore penetration and bonding also stop. For a lightweight model, the weaker bond of fast-drying cement will get by - but for larger and heavier models that are subjected to more severe stresses and strains, a stronger and more permanent bond is a must. To sum it up, you sacrifice strength for the convenience of fast construction. So for best results, Ambroid "Regular" cement should be used wherever possible.

Beware of cement "blush".

When the weather conditions are hot and humid, fast-drying cement joints frequently turn white or "blush". What actually happens is that high humidity coupled with fast evaporating solvent causes the cement film to be cooled below the condensation point of the surrounding atmosphere. The result is that water from the air is deposited on the cement film - just as a car window becomes steamed up in cold weather. This action separates the waterproofing ingredients from the cement mixture, resulting in a "blush" joint of low strength compared to a normal tough and transparent joint.

How to make strong joints.

- Avoid cementing in a damp atmosphere.
- Do not sand surfaces too smooth. Slightly rough surfaces will result in better cement penetration or "bite".
- All surfaces must be free from dirt, grease and moisture.
- For maximum strength, double-cement by first coating the two cementing surfaces, allow to partially dry - then add a second cement coat and firmly press the parts together, holding for several minutes under pressure.
- Useful items for holding parts together until dry are masking tape, rubber bands, rubber strip, straight pins and "C" clamps.

Devcon® "5 Minute"® Epoxy
Brand

For super-fast repairs.



R-206

Sets in 4 to 7 minutes. First epoxy material to provide all physical strengths of epoxy adhesives *plus* quick setting, even in thin films and at low temperatures. Bond all metals, wood, glass, etc. For building RC models, repairing metal or pottery lamps, toys, metal or wooden furniture. For color matching, add food coloring.

Devcon® "5 Minute"® Epoxy
Brand

For super-fast bonding, even at 0°F and in thin films. Any color match can be obtained — just add food coloring to mixture.

R-207



Devcon® "5 Minute"® Epoxy
Brand

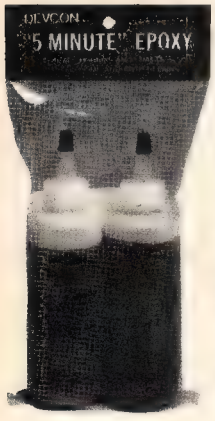
In the revolutionary new "Dev-Tube"® the 2 in 1 dispenser.

R-208



You simply snip off the double nozzle of this unique dispenser and push out equal parts of epoxy and hardener — automatically. Mix and apply. To close dispenser plug nozzles with special cap. No more waste motions, or lost caps. Devcon "5-Minute"® Epoxy for super-fast repairs is now available in the "Dev-Tube" dispenser.

Devcon® "5-Minute"® Epoxy
Brand



M-209

Ideal for model making, hobbies, general bonding and repairs. Comes in twin plastic squeeze bottles for big jobs. Packed in heavy-duty plastic pouch with complete instructions. Will stand on counter or hang on pegboard.

Devcon® "Slow Cure"



M-33

Clear epoxy in plastic squeeze bottles. Sets in approx. 30 minutes. For hobbies, crafts, general bonding and repairs. Heavy-duty plastic pouch holds twin bottles with complete instructions. Can be displayed on counter or on pegboard.

Devcon® "Seal-It" R-250

Silicone rubber; guaranteed for 10 years.



Available in white, and clear. 100% silicone rubber — no solvents or diluents. Seals bathtubs, sinks, storm windows, marine decks. Bonds loose tiles, fixtures. Permanently flexible. Will not shrink, crumble, crack, or dry out. For home, car, marine, or farm repairs. To make gaskets in place. Outstanding adhesion to glass, porcelain, metals, wood.

DEVCON

No workshop or field box is complete without Devcon 5 minute, Slow Cure, or Seal It Silicone. These products are of the highest quality.

DEV32206	DEVCON R-206 LARGE 2.5 OZ.	2.65	2.25
DEV32207	DEVCON R-207 GIANT 16 OZ.	9.50	7.95
DEV32208	DEVCON R-208 DEV-TUBE 1 OZ.	1.95	1.65
DEV32209	DEVCON M-209 9 OZ. 5 MINUTE	5.80	3.95
DEV32233	DEVCON M-33 9 OZ. 30 MINUTE	5.80	4.75
DEV32250	DEVCON R-250 SILICON RUBR 3 OZ	2.75	2.35

SUPER MODEL CEMENT

DU-BRO

GOOD OLD FASHIONED MODEL AIRPLANE CEMENT FOR WOOD MODELS.



SUPER DISCOVERY!

Super Model Cement is perfect for bonding A.B.S. plastic (A.R.F. airplane and helicopter bodies) to clear buyterate plastic (canopys, windshields, etc). Never before have we found any glue that worked as well for this type of application. Primarily though, it's an exceptional balsa wood glue. Strong, clear, super quick drying and fuel proof, Super Model Cement is perfect for building and repairing any balsa wood model, from microfilm, (thinned down) to full channel r/c.
Cat. No. 201....1¾ oz. tube

DUB20201	DUBRO 201 1.75 OZ MODEL CEMENT	.75	.70

KWIK SET
6 MINUTE EPOXY



GAS MODEL PRODUCTS

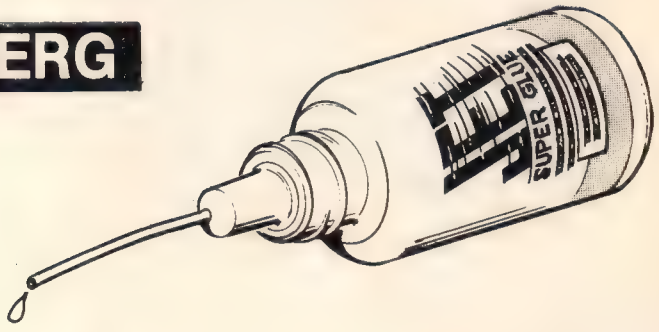
GMP KWIK SET 6 MINUTE EPOXY

A two part clear epoxy formulated for model construction using the highest quality available. Fuel proof, water proof, and resistant to most harsh chemicals. Will not become brittle with age as do some cheaper epoxies. Available in easy to use flip top containers. Net weight combined 10 Oz.

GAS32000 GAS MODEL PRODUCTS 6 MIN EPOXY 6.95 5.95



GOLDBERG



GBG32000 GOLDBERG JET SUPER GLUE 1/2 OZ 2.95 1.95

GBG31000 GOLDBERG BLUE GOO ADHES. 16 OZ 2.95 2.80

INSTRUCTIONS

1. COVERING WITH BALSA: First trim edges of sheets with razor knife and straight edge. Center sheet should be soft, straight, "A" grain - bends easily with less tendency to crack. Join sheets with Ambroid, "JET", Zap, etc. (Avoid Titebond or white glue - hard to sand). Final sheet size should be slightly larger for trimming edges later. Sand joints even with sanding block. Sand foam core lightly. Vacuum clean all surfaces.

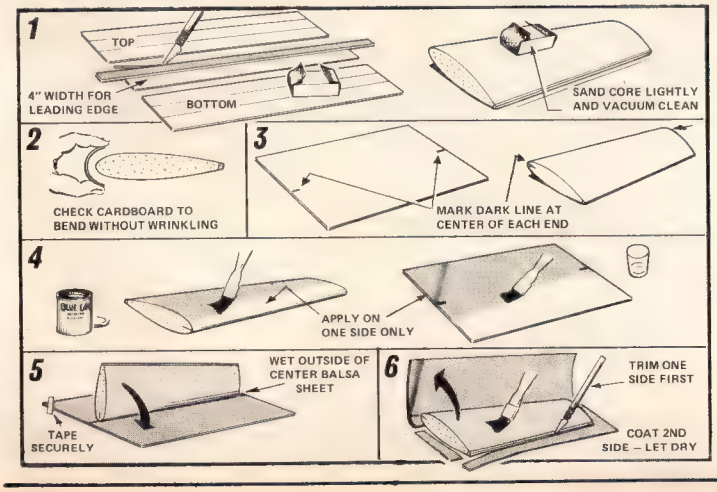
2. COVERING WITH THIN CARDBOARD: Use 5 or 6 pt. Krome-Kote obtainable from paper supply houses, printers, stationers, etc. Check grain direction of small piece to bend without wrinkling. Grain must parallel leading edge. Piece should be slightly larger for trimming edges later. Use shiny side out, sand dull side and foam core lightly, and vacuum clean.

3. Mark center of sheet on inside, and center of leading edge of wing core on both ends. Be sure to work on a flat, solid surface.

4. With a brush 1" to 2" wide, apply thin coat of Blue Goo evenly to sheeting and one side of wing core. Let dry 30 to 45 minutes, and no more than 3 hours. Keep brush in water glass or jar with 1/4" of water. Clean brush with hot water before cement sets up. Wet outside of center balsa sheeting with warm water for easier bending.

5. Prepare carefully for joining. Once in contact, surfaces cannot be adjusted. Tape sheeting securely in place. Line up center marks, and set leading edge of wing core on sheeting. With firm pressure, roll coated side of core down and back to trailing edge. Press together all over for good bond, then trim excess.

6. Coat 2nd side of core. Allow drying time as above and apply sheeting. Repeat pressing and trimming. Let dry overnight.



JET SUPER GLUE

A Cyano-Acrylate Adhesive

JET Super Glue is a clear adhesive that flows like water. One tiny drop will flow through 1/4" to 1/2" of a tightly fitted joint. In normal temperature and humidity, it cures in approximately 10 to 20 seconds, and may be used to bond balsa, hardwood, plywood, many plastics, rubber, glass, ceramics, metal, leather, or some fabrics. The normal shelf life at room temperature is approximately six months. If stored in a refrigerator, the shelf life can be extended two or three times.

JET is a non-toxic adhesive, but should be used with adequate ventilation. It can be removed with nail polish remover or acetone. When the adhesive sets up, it sometimes gives off fumes which may cause the eyes to water, but the fumes are non-toxic. However, the adhesive will bond body tissue, and can irritate the eyes. If the liquid gets into the eyes, flood with water and see a physician for cyano-acrylate adhesion.

While there is the possibility of gluing fingers together or to a piece of balsa when using this new adhesive, most people have no real problems getting stuck fingers apart because of natural skin oils. Just pull apart slowly. For insurance, you may want to rub a little cold cream or Vaseline Petroleum Jelly into your hands before JET is used, but do not touch the area to be joined. Where two parts must be pressed firmly together and the parts are dampened with the adhesive, wax paper can be used over the pieces to prevent finger contact.

KEEP AWAY FROM CHILDREN

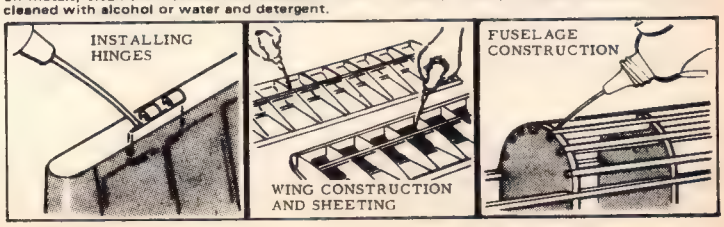
USING JET

Each container of the adhesive is provided with a length of teflon tubing. Remove the cap and insert about 1/4" of the tubing into the tip of the container. Once installed, the tubing need not be removed or capped as long as the bottle isn't tipped over. Rate of evaporation is extremely low. If the end of the tubing gets clogged, pull the clog loose with your fingernails. If it can't be removed that way, just cut a bit off of the end. Whenever cap is removed, use paper towel to clean off adhesive from all threads.

Using JET is somewhat different from using other kinds of adhesives. With this material the pieces are first pressed together as you want them. Then the adhesive is sparingly applied to the joint to be glued. A single drop will be adequate in most installations. If you want to add more, do so after the first application sets up. Hold the parts firmly together for about 15 seconds, and that's it. No pins, clamps, or weights are needed. If too much JET has been used on a joint and it doesn't set up in the normal period of time, the heat from a soldering gun, MonoKote iron, heat gun, hair dryer, light bulb, or cigarette may be used to "kick" it off.

Since JET is very thin, it penetrates very well into most porous materials. However, because it does not build up a fillet of its own as many other adhesives do, a solid glue joint depends on a good fit of the parts to be joined. Where two parts do not fit accurately, some balsa dust or microballoons may first be added to the joint to fill the irregularities. Then apply the adhesive.

When used on wood, JET works best on clean, fresh surfaces. This is especially true with hardwood and plywood. If the surfaces to be joined have aged, a light sanding will remove those substances from the surface that interfere with the normal set-up of the adhesive. When used on metals, clean the material with acetone or MEK. Plastics, rubber, and other substances may be cleaned with alcohol or water and detergent.



HOBBYPOXY



HobbYpoxy

Why 3 epoxy glues?

Because we know that all model building can't be done with only one type of glue. That's why Hobbypoxy makes three.

● Formula 1 is a general purpose epoxy glue that gives you 15 minutes of working time and cures hard in an hour. That's just about right for most construction, and for installation of components that need to be shifted around a bit for perfect alignment before the glue sets.

● Formula 2 has a much longer working time, 45 minutes, which makes it perfect for large-area laminating and planking of wings. (You can put glue on all the ribs, position the skins and pin them down before the glue hardens.) Formula 2 is also recommended for fiberglass layup, fuel-proofing engine compartments, and as a surfacing resin on bare balsa.*

● Formula 4 is our superior version of the popular "five minute epoxies." Great for quick construction, quick repairs, and perfect for joining parts that are impossible to clamp or pin . . . just hand-hold them for a few short minutes and it's done.

All Hobbypoxy epoxy glues are completely fuel proof and permanently flexible. Joints will never crack or shatter the way they do with some other epoxies. And, contrary to popular myth, Hobbypoxy epoxy glues will adhere to and cure on properly prepared fiberglass. So whatever you've got to glue, glue it with Hobbypoxy, the original epoxy for models.

*For a complete description of the use of Formula 2 for finishing, send for a free Poxy Painting Pointers brochure. Write the word "glue" on your request.

HOB32001	HOBBYPOXY FORM 1 EPOXY 1-1/80Z	1.50	1.35
HOB32002	HOBBYPOXY FORM 2 EPOXY 8 OZ.	4.00	3.25
HOB32004	HOBBYPOXY FORM 4 EPOXY 2 OZ.	2.00	1.70

Send request to: HOBBYPOXY PRODUCTS
A division of Pettit Paint Co.
36 Pine St., Dept. Tower
Rockaway, N.J. 07866

HOT STUFF





Blue Line is the same as regular Hot Stuff except that it is tinted blue so you can see how much you are applying so you don't waste any.

HOT32001	HOT STUFF ADHESIVE HS-1 .5 OZ.	3.50	2.50
HOT32002	HOT STUFF TUBING 18 IN. T-500	.50	.45
HOT32100	HOT STUFF BLUE LINE HS-5 .5 OZ	4.95	3.95

Satellite City

HOT STUFF™

THE #1 INSTANT ADHESIVE

"HOT STUFF" is a SUPERIOR cyanoacrylate adhesive compounded for a rapid cure rate of three to twelve seconds with EXCEPTIONAL BOND STRENGTH.

"HOT STUFF" penetrates the most closely fitted parts and is used for total bonding of structures. "HOT STUFF" bonds PLYWOOD—BALSA WOOD—SPRUCE—PINE—NYLON—RUBBER—METALS—MOST PLASTICS and CERAMICS.

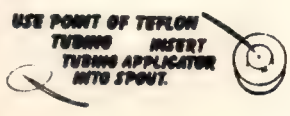
Special Teflon "CONTROL DROP" applicator tubing is supplied to allow *very* small drops to be used. Excessive amounts slow curing time and do not increase bond strength. Cut end of applicator tubing to a bevel and insert about ¼" into hole in top of container—No need to remove tubing once inserted.

"HOT STUFF" works best on *clean* materials which fit closely. Should a gap exist, or if "pitchy" woods such as spruce or pine are to be bonded, fill gaps or "dust" lightly with common BAKING SODA before bonding. Baking Soda is an excellent filler and sands well.

Storage: Keep out of direct sunlight—Shelf life runs six months under normal temperatures. Refrigeration extends shelf life.

EXTEND "HOT STUFF" SHELF LIFE INDEFINITELY!

1. PLACE UNOPENED BOTTLES IN THE FREEZER. MATERIAL WILL NOT FREEZE OR CHANGE.
2. WHEN READY TO USE ALLOW TO RETURN TO ROOM TEMPERATURE.
3. WIPE OFF ALL CONDENSATION FROM BOTTLE.
4. REMOVE CAP AFTER BOTTLE IS DRY.
5. SHELF LIFE TIME STARTS AGAIN AFTER REMOVAL FROM FREEZING UNIT.



KEEP OUT OF REACH OF CHILDREN

WARNING – EYE IRRITANT – CONTAINS CYANOACRYLATES.

PACER

ZAP

Popular super sudden adhesive for the hobbiest ■ Bonds in seconds ■ strong, positive grip up to 5,000 psi ■ Virtually universal ■ Bonds similar and dissimilar materials ■ Wood ■ Vinyl ■ Metal ■ Leather ■ Rubber ■ Plastics ■ Each batch lab tested ■ Bottle coded ■ Excellent shelf life ■ Exclusive applicator for precise joints

X-30

Newest of the fast setting cyanoacrylates ■ Added time dimension ■ 30-second set time ■ Time for last minute fitting and adjustment ■ Higher viscosity fillets minor misfits ■ Competetively priced

ZIP

Precision chemistry epoxies ■ Samson strong bonding ■ Five minute set time ■ More product less money ■ No drip — no mess application ■ Accurate mixing ■ Fuel proof, water proof



WHAT IS ZAP?

1. **ZAP** is a single component adhesive, instant setting with space age strength. Requires no clamping or waiting. Bonds most plastics, metals, rubber, ceramics, tile or glass — even nylon. Not recommended for porous items such as some woods, paper or foam.
2. **PREPARING APPLICATOR** Insert special applicator tube in tip of bottle about ½ inch. Tube acts as its own stopper and will seal itself after use. Simply trim off extreme tip when ready to use again. Not necessary to replace cap, but if you do, **remove residue from cap threads and applicator with paper towel.**
3. **DIRECTIONS:** Surfaces to be joined should be clean and dry. In case of glass or ceramics wash thoroughly and dry carefully. When bonding metals roughen surface with sandpaper and clean. The least amount of adhesive gives the fastest set—strongest bond. Position parts to be joined tightly together — check for proper alignment. Apply a drop of **ZAP** directly to joint (it will wick into crack). Hold parts firmly together for 10 to 20 seconds to allow bond set strength to occur. Strength will increase in 12 hours up to 5000 psi.

READ THIS COMPLETELY

WARNING: EYE IRRITANT. BONDS BODY TISSUE IN SECONDS. Contains cyanoacrylate ester. Apply ONLY to surface to be bonded. Use with adequate ventilation. In case of body contact, flush with water. Keep away from children. In case of skin contact, do not attempt to pull bonded skin surfaces apart. Gently peel bonded area. Fingernail polish remover or acetone will soften the adhesive bond. Get medical attention for any eye or internal contact.



Zap GOLD bonds in seconds! and now...you SEE it at work!

- **Practically universal**
- **Bonds:** Wood • vinyl • metal • leather • rubber • plastics • glass • china • similar and dissimilar materials
- **Save adhesive and get stronger bonds**
  - No waste through reapplication. You SEE the first drop go on!
  - Best bonds use the least adhesive. SEE how much you are using!



PCR32030	PACER X-30 ADHESIVE .36 OZ.	3.50	2.50
PCR32050	PACER ZAP GIANT .36 OZ.	3.50	2.50
PCR32060	PACER ZAP GOLD 1/2 OZ.	4.95	3.95
PCR32100	PACER ZAP ECONO PAK 1 OZ.	5.95	4.50
PCR32104	PACER ZIP 5 MIN EPOXY 4 OZ.	2.98	2.65

SOUTHERN R/C

Mix-A-Matic Epoxy Kit #SRC32001

This epoxy kit includes 2 pump dispensers filled with an epoxy that has a 2 hour cure time. It comes with several mixing cups and stirrers. Takes the guesswork out of mixing equal porportions. This epoxy leaves no oily film and is not brittle. 14 oz.





SRC31101	SOUTHERN RC SORGHUM 7 OZ.	2.95	2.75
SRC32001	SOUTHERN RC MIX-A-MATIC 14 OZ.	8.50	7.25

Sorghum #SRC31101

Sorghum is a super contact cement for sheeting foam wings. Features extremely lightweight, tremendous adhesion, easy to use, and a very non-critical "open" time of 30 min. to 4 hrs. 7 oz. plastic bottle.



TITEBOND

More than twice the strength of white glue . . . stronger than wood itself. Titebond superior strength has been proved by A.S.T.M. test D905-49 using hard maple. Since this test is the wood working industry's standard for determining shear strength of adhesives, it's no surprise that 9 out of 10 leading furniture manufacturers use Titebond Glue.

Spreading easily at temperatures from 45° to 110° F., Titebond has excellent tack, toughness and durability. Sets fast, shortening clamp time, and resists heat and solvents (lacquers, varnishes, sealers). Titebond is sandable, does not soften or gum up sandpaper. Used by carpenters and handymen as well as household and commercial users for gluing wood, cloth, paper and many other porous materials.

Titebond Glue is safe for children to use. The aliphatic resin formula will not stain, is non-toxic and non-flammable.

TIT31008	TITEBOND ALIPHATIC RESIN 8 OZ.	1.79	1.70
TIT31016	TITEBOND ALIPHATIC RESIN 16 OZ	3.00	2.85

WILHOLD

CHARACTERISTICS

Ideally used for bonding porous materials; plywood, balsa wood, hard wood, hardboard, leather & fabrics. Excellent sanding qualities. Can be painted.

Wilhold Aliphatic Resin Glue is a ready to use glue with outstanding application qualities: super fast grab, tremendous strength, quick setting. Dries clear. Vibration and shock resistant. Recommended for production woodworking. Meets Government Specification MMM-A-193C. Tested & approved for radio-control model construction. Recommended by R/C Modeler Publications.

Wilhold Aliphatic Resin Glue can be applied at temperatures between 40°F. and 110°F. For best results, the ideal temperature of glue and materials would be 70°F.

Surfaces should be clean, dry and dust free. Apply thin coat and press into position. If weights or clamps are used to hold materials in alignment, use minimum pressure to prevent a "starved glue joint." Under normal conditions, 10 to 25 minutes clamping is sufficient. Overnight drying is best.







CHARACTERISTICS

Wilhold 54 Spray Adhesive is a translucent contact type cement that bonds a variety of materials with ease . . . without mess.

Excellent holding power, it provides a fast "tacky" grab that allows positioning of lightweight materials to the bonding surface. This one stays flexible.

It is non-wrinkling on thin paper. Fabrics stay down flat and tight. The tip produces a fan spray that lays down an even, uniform glue line. Typical of any aerosol product, there is an overspray. Use newspaper to keep work area clean. Use paper templates over areas that are not to be sprayed.

TESTED & APPROVED BY RADIO/CONTROL MODELER MAGAZINE

R/C-56 . . . a multi purpose adhesive specifically formulated and highly recommended for RC modelers, desirous of bonding vinyl canopies to wood, foil, fiberglass and painted surfaces . . . on airplane, boat and helicopter models. R/C-56 is equally applicable for bonding ABS plastic, butyrate and styrene foam, creating a firm, flexible bond to withstand shock and vibration. Bonds porous and non-porous materials with outstanding adhesive results. Dries clear. For maximum results, R/C-56 should be used sparingly and it's economical too.

WLH31008	WILHOLD ALIPHATIC RESIN 8 OZ.	1.75	1.65
WLH31017	WILHOLD ALIPHATIC RESIN 17 OZ.	2.89	2.75
WLH31054	WILHOLD SPRAY ADHESIVE 12 OZ.	3.20	3.05
WLH31056	WILHOLD R/C-56 ADHESIVE 4 OZ.	1.20	1.15

Batteries and Chargers

To the R/C'er, batteries are his main power source. He uses them to power his airborne system, his transmitter, and all of his ground support equipment. We carry a variety of chargers and batteries for many purposes. The batteries listed here are not for powering any of the R/C systems we handle. Those batteries are listed in the section for that specific radio manufacturer.

The batteries listed below are, for the most part, shown with rather complete descriptions for their use, but we would like to bring out a few points. The battery listed as the Tower 12 volt motorcycle batter is a standard lead-acid battery. It is very similar to the one used in your family car. It is made of lead and zinc plates separated by insulation. These are immersed in a solution of dilute sulphuric acid. Because we ship these batteries all over the country, you can see that shipping acid with these batteries would be quite hazardous. You can obtain the acid (also called "electrolyte") at your local service station or motorcycle shop for a nominal fee . . . it is exactly the same fluid that is put into your automobile battery when it is new.

Once your battery has been put into service, the fluid level should be maintained by the addition of distilled water.

When you charge your lead-acid battery, you should make sure that the positive terminal of the charger is connected to the positive terminal of the battery. Also connect the negative terminals of each together in a similar fashion. Remove all of the caps of the battery so that the gases generated during charging will be vented off. When you use the charger supplied by Tower, you should charge the battery for at least ten hours, but no more than twelve hours. Excess charging will cause the fluid level to decrease well below the minimum required for good battery operation and life. Also, always charge your batteries in a well-ventilated area to allow the battery gases to disperse.

We also carry a Gel-cell battery. This is a lead-acid battery that has a gelled electrolyte. The battery is sealed so that you will not have any potential of acid leakage if you tip the battery onto its side. In fact, this battery can be positioned in any way you want it! When you charge it, use the charger recommended for it, as another charger may cause damage to the battery.

ACE

ACE VARI-CHARGER

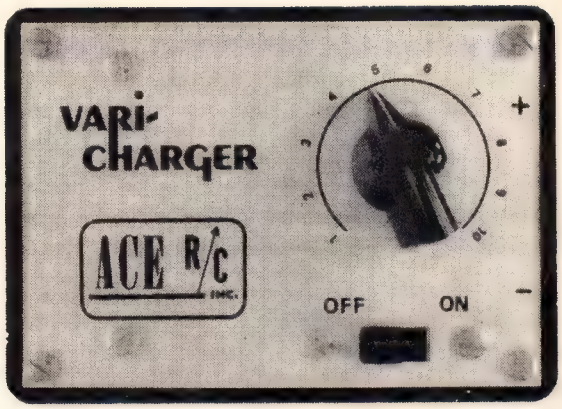
The Vari-Charger is housed in a small plastic case, features a variable rate, and uses a high quality transformer which isolated it from a 110 volt AC line. Will charge receiving packs at a charging rate up to 250 mils. Chart below shows the number and size of cells so that you can determine where to set the knob on the scale. No meter is furnished, although meter may be put into the circuit if desired for temporary testing.

Makes it ideal for charging nickel cadmiums of the 100, 225, 500, 600 and 1200 milliamp hours in series. Completely wired and tested. Made of U.S. components.

It's ideal for charging 100 to 1200 mil nickel cadmium receiver and transmitter packs. Also works well for trickle charging 1.2 V wet cell glow plug battery.

Check the chart (right). On the left side you will see a list showing the number of cells in a pack. Suppose you want to charge a two cell pack of 500 mah capacity. The rate should be about 50 ma. Read from the 2 cell point until you reach close to 50 (actually 47 on the chart). This indicates pointer should be set at 8. Use chart reading similarly for any size battery—always determine setting by number of batteries in pack and the rate you require.

ACE86910 ACE VARI-CHARGER (ASSEMBLED) 13.95 12.25



NUMERICAL POSITION OF POINTER
(1K)

	1	2	3	4	5	6	7	8	9	10
1 cell	12ma	14ma	16ma	18ma	22ma	26ma	34ma	48ma	78ma	200ma
2 cells	12ma	14ma	16ma	18ma	21ma	25ma	33ma	47ma	74ma	195ma
3 cells	11ma	13ma	15ma	17ma	20ma	24ma	31ma	43ma	67ma	185ma
4 cells	11ma	12ma	14ma	16ma	19ma	23ma	29ma	41ma	63ma	175ma
5 cells	10ma	12ma	13ma	15ma	18ma	22ma	28ma	38ma	60ma	160ma
6 cells	10ma	11ma	12ma	14ma	17ma	20ma	26ma	36ma	56ma	150ma
7 cells	9ma	10ma	12ma	14ma	16ma	19ma	25ma	34ma	54ma	140ma
8 cells	8ma	9ma	11ma	13ma	15ma	18ma	23ma	32ma	50ma	130ma
9 cells	8ma	9ma	11ma	12ma	14ma	17ma	22ma	30ma	48ma	120ma
10 cells	8ma	9ma	10ma	11ma	13ma	16ma	20ma	28ma	45ma	110ma

1.5 Volt Dry Cells

EVEREADY



No. 6
#EVE19006



No. 735
#EVE19735



No. 711
#EVE19711

(At left) Eveready 1.2 Volt dry cell batteries are excellent batteries for 1.2 volt glow plug use as they are specially designed to provide long life at a moderate price. Just attach the leads from your glow plug kwik clip or glow plug connector cord set and you're ready to fire up your engine effortlessly.

(At right) Eveready #276 9 Volt dry cell is recommended for dry cell transmitter use. The Tower 3 channel requires this battery.

EVE19006	EVEREADY #6 1.5 V BATTERY-DRY	3.50	3.30
EVE19091	EVEREADY E91 AA PENCELL BATT.	.80	.75
EVE19276	EVEREADY #276 9 V TX BATT-DRY	4.70	4.45
EVE19711	EVEREADY #711 1.5V BATTERY-DRY	4.30	4.10
EVE19735	EVEREADY #735 1.5V BATTERY-DRY	2.78	2.70



No. 276
#EVE19276

ASTRO FLIGHT (AFI)



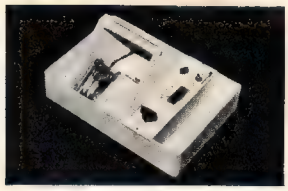
RAPID CHARGER. The Rapid Charger is designed to charge any 6 or 12 volt systems from your auto cigarette lighter receptacle. The ammeter indicates the state and condition of charge and the timer automatically terminates the charge when the charge cycle is complete.



SEPARATE CHARGE CORD. Although we strongly recommend the rapid charger and field chargers for our electric systems, these simple charge cords can be used to charge our systems if proper procedure is followed. Available with an auto cigarette light plug and with alligator clips.



AIRCRAFT SWITCH HARNESS. On-off switch and charge receptacle packaged together. You will need one of these for each model.



FIELD CHARGER. This deluxe unit comes completely preassembled, ready for finish. Compartments for your props and wrenches, transmitter, and two or four gell cells are provided. The Field Charger will charge all Astro systems at the flight line. Two 12 volt 4 amp gell cells, or four 6 volt 7 amp hour gell cells shown on Page 4 are required. Charging the Astro 25 twin system requires one additional 6 volt battery.



12 VOLT BATTERY CHARGER. Designs to charge all 12 volt gell cells and motorcycle batteries overnight from a 110 volt wall outlet. Carry this mini charger in your flight box and don't be caught with a dead battery.

AFI10000	AFI AIRCRAFT SWITCH HARNESS	4.95	4.70
AFI10001	AFI STD. CHARGE CORD	7.95	7.50
AFI10002	AFI AUTO CHARGE CORD	7.95	7.50
AFI10003	AFI 12 V. BATTERY CHARGER	8.95	8.50
AFI10004	AFI RAPID CHARGER	29.95	25.45
AFI10005	AFI FIELD CHARGER	39.95	32.95

FUSITE

GloBee Fire Plug...
an integrated system for fast, variable power starts



Charger not included with FirePlug

The new GloBee Fire Plug is the world's first completely integrated glow plug starting system. Just attach your own favorite plug connector to the terminals. This hand-held unit not only ignites your plug but also monitors your starting condition—a "0" ammeter reading indicates a burnt out plug, and a higher than normal reading reveals a flooded engine. Look at these additional features:

- thumb controlled rheostat delivers optimum current flow to match weather, fuel, and plug ignition specifications
- easy-to-read ammeter shows precise power output
- high impact polypropylene case has fluted base for non-slip, one hand operation
- all circuitry is safety fused with spare fuse included
- color-coded engraved terminals reduce chance of error
- overnight recharge four times a year should maintain power level for long service life

Buy a GloBee Fire Plug today, and enjoy years of fast, reliable engine starts perfectly matched to your special requirements.

AMMETER: 0-10 ampere range
RHEOSTAT: 25 positive detent positions
POWER: 2 volts (nominal)
5 ampere hour rating
200 watts (peak power)
SIZE: 2" diameter by 5½" tall

RECHARGE: Overnight, 3-4 times a year or as necessary
Capability of 150 recharges
2.3-2.6 VDC input
2 ampere max. charging current
Ammeter indicates recharge state
WEIGHT: 1.2 pounds (550 grams)

FUS90000	GLOBEE GBFP-1 FIREPLUG	26.95	21.50
FUS90001	GLOBEE GBFC-1 FIREPLUG CHARGER	7.95	7.15

DA ENTERPRISES



The DAE Hand-I-Start, pictured to the left, is a pocket size starting battery and clip all in one. It is a GE ni-cad 1.2 volt one amp battery mounted on a Sullivan nylon glow plug clip. It is rechargeable using any charger suited for 1.2 volts and 1 amp. This item is very handy to use for those "flight line re-starts" that seem to happen when your regular starting battery is on the other side of the field, etc.

The DAE Handy charger shown at the right is perfect for charging the Hand-I-Start. Full charge takes 4 to 6 hours.



DAE19000	DAE HAND-I-START 1.5 V BATTERY	7.95	6.60
DAE20000	DAE HANDI-START CHARGER #7609	9.95	8.95

M.E.N.

The flexibility of two batteries, for 6 Volt boats and fuel pumps, and separate placement in flite boxes for balancing, is a unique feature. M.E.N.'s batteries offer 25% more amp-hour capacity than our competitors. The M.E.N. battery requires only recharging. There are no fluids to add, liquid levels to check, or routine maintenance to perform on the PB 660. M.E.N.'s gelled electrolyte ends your problems of finding proper fluids and getting it into the battery. When tilted or inverted, full capacity is obtained with M.E.N.'s PB 660 because the gelled electrolyte will not flow away from the plates. If totally discharged no permanent cell reversal will occur, however, to obtain maximum cycle life observe the recommended cut off voltage. M.E.N.'s PB 660 batteries may be connected in series or parrellel to obtain higher voltages or higher capacity. M.E.N.'s high impact non-conductive plastic case cannot cause short circuits, will not rust, or cause corrosion to other equipment.

The PB-660 batteries weigh 2.3 pounds per 6 volt unit. They have a capacity of 6 Amp Hour at a 20 hour rate of .3 amperes. The PB-660 are furnished with connectors which mate with a Molex plug 1545-P-1 and female pins 1189.

Normal charging can be done in sixteen to twenty-four hours. The initial charge current should be .5 to 1 amperes tapering to .15 amperes or lower. Fully charged batteries typically have an end of charge voltage of 7.4 volts per unit.

Overcharging reduces battery life, under no conditions should the charger be left on over 48 hours. Never store the Men battery in a fully discharged condition as the plates will be adversely affected, limiting the capacity of the battery.

M.E.N. packages two PB 660, 4 matching plugs, 8 matching female pins, and specification and warranty sheet in a single box to provide 12V-6A.H.R. to the user.



MEN19200	MEN 12 VOLT GELL-CELL 6 AMP-HR	26.95	23.95

S&O



BATTERY TESTER

- Invaluable field tester
- Tests 8 cell transmitter and 4 cell NI-CD battery packs under load
- Tells you when it is time to stop flying and charge your batteries
- Easy to use direct reading meter (no knobs to adjust)
- Extremely accurate expanded scales — 4.3 to 5.3 VDC and 8.6 to 10.6 VDC
- Detects bad cells and/or abnormal current drain
- Can be used to determine battery capacity and to discharge transmitter and receiver packs individually or simultaneously



FAST CHARGER
Only Fast Charger with all of these Features

- Charges 8-cell transmitter or 4 cell airborne NI-CD battery packs individually or simultaneously
- Metered charging current
- New improved higher charge rate
- Diode protected
- Thermally protected
- Fifteen minute charging time



BATTERY PACK

- Reliable GE NI-CD cells
- Full 250 MA - HR capacity
- Light weight — 2.5 oz.
- Small size (1¼ x 1¼ x 1½")
- Rugged Construction
- Fuel Resistant Nylon Case
- Can Be Fast Charged

S&O86000	S&O QUICK CHARGER	29.95	26.95
S&O86100	S&O BATTERY TESTER	24.95	19.95
S&O86250	S&O 250 MA BATTERY PACK	16.95	15.25

SULLIVAN

NOW... THE SUPER POWER TEAM

This Could Be The Start of Something Big



SUPER/GEL... EXPRESSLY FOR MODEL USE

Say "goodby" to batteries really designed for something else. No need to "make do" anymore. Super/Gel is here with:

- **Fast Charge & Discharge Needed for Models**
- **Sealed-in Gel. No water, no spill, no leak**
- **A Full 4.5 amp hours between recharges**
- **Long Life. Recharge 500 Times or More**

SULLIVAN CHARGER... A GREAT TEAMMATE

- **UL Listed, Plugs into Ordinary House Current.**
- **Fully Charges Battery in 12 Hours.**
- **500 ma. Output, Ideal for our New Battery**
- **Can Be Used For Most Wet Cell Batteries, Too**

NEW...YOU'LL GET QUITE A CHARGE OUT OF THESE

SUL12208	SULLIVAN 12V BATT CHARGER #BC1	9.95	8.75
SUL12209	SULLIVAN 12V GEL-CELL 4.5AH	29.50	24.95

TATONE

NICKEL CADMIUM ➡ **GLOW PLUG STARTER** *with HANG-ON CONNECTOR** Pat. Pending



"Pocket Booster"

1.2 SCL
Sub "C" Cell
⅞ X 1-9/16
1½ oz. complete unit

- Rechargeable NI-CAD battery. Made in U.S.A.
- Surplus, reconditioned. Can be used over and over.
- Provides a hot glow to any plug.
- For R/C, U-Control and Free Flight models.

NEW! Hang-On connector eliminates all booster wires and clips. Just hang the battery on the glow plug. Lift off when the engine starts. Truly, the easiest starting battery yet devised.

BATTERY CHARGER

special for "Pocket Booster"



- 100 MA for 1.2 Amp battery
- Charges in 16 hours
- Can be used for multiple packs at longer charging time

TAT19095	TATONE #95 GLOW PLUG STARTER	6.75	6.10
TAT20096	TATONE #96 BATTERY CHARGER	6.95	6.25

TOWER HOBBIES



12 VOLT STARTER BATTERY—WET: Pictured at the left is this motorcycle battery that is perfect for all electric starters, etc. 12 volt, 5 amp-hr rating.

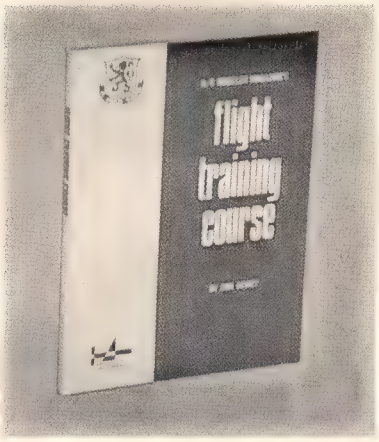
12 VOLT WET BATTERY CHARGER: This is a .5 amp charger that is perfect for the above battery.

12 VOLT GELL/CELL BATTERY: Pictured at the right it is a 4-amp-hr rating and can be recharged using the AFI charger shown on page 184.

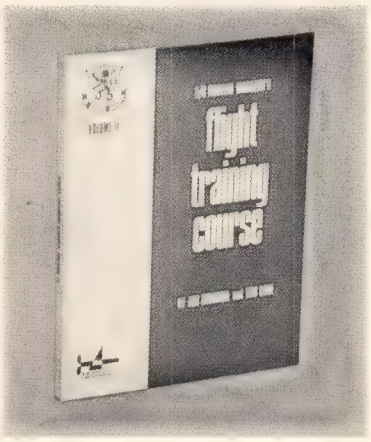


TOW19000	TOWER 12 V STARTER BATTERY-WET	26.95	19.95
TOW19100	TOWER 12 V BATTERY CHARGER	13.95	9.95
TOW19200	TOWER 12 V GEL/CELL BATTERY	26.95	23.95

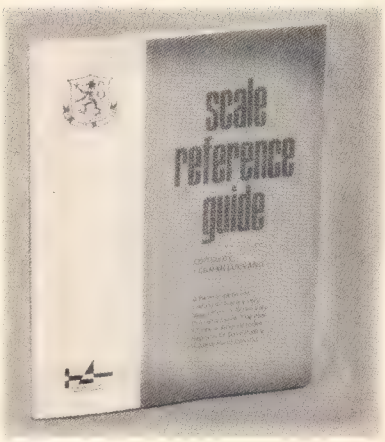
R/C MODELER MAGAZINE ANTHOLOGY LIBRARY



R/C Modeler Magazine's Flight Training Course is the most comprehensive library of material for the radio control beginner and sport flier ever published. Over 300 photos and over 200 pages. Features the RCM Basic and Advanced Trainers. Everything you need to know.



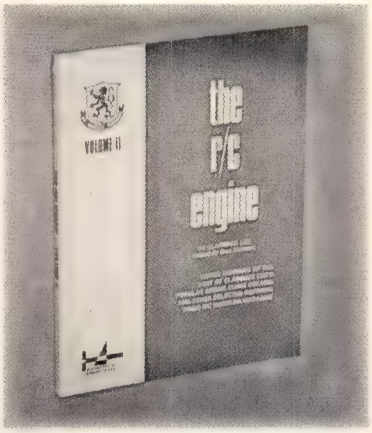
Volume II of RCM's Flight Training Course teaches you how to trim your plane for competition maneuvers, then takes you step-by-step through each maneuver with diagrams and transmitter instructions.



"Scale Reference Guide" gives reference to virtually every scale plan or three-view drawing that has appeared over the past 40 years in the leading model publications. Also included are reprints from Dave Platt's popular Scale in Hand column.



"The R/C Engine", by Clarence Lee. Edited reprints of the best of Clarence Lee's popular Engine Clinic column by subject material. Also, full size drawings and specifications on the most popular RC engines. One of the best selling books ever printed for the R/C enthusiast.



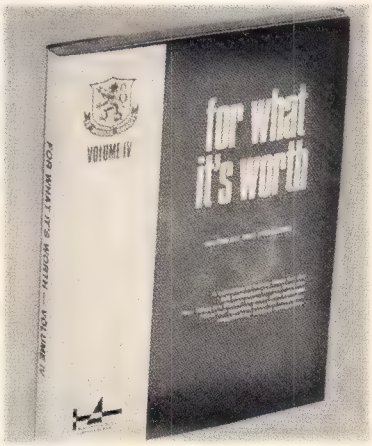
Clarence Lee's articles reprinted by subject category and completely indexed for fast reference — plus a complete construction article by Henry J. Lopez, never before published, on scratch building a digital read-out tachometer. Also other selected features pertaining to the RC engine. No material in Vol. II has been reprinted from Vol. I.



A must for the serious Scale or Stand-Off Scale builder, and flyer. A compilation of Dave Platt's columns indexed by subject material. Learn the secrets of scale such as finishing, detailing, etc.



This book is the 'last word' on any aspect of foam wings, from coring to covering. You will be taken through every aspect of this subject, including the construction of a permanent shop hot wire cutter; cores; landing gear blocks; and much more. Cover your cores for less than $1.00.



For What It's Worth, Volume IV, is the biggest book we have compiled to date featuring reprints of all of your favorite how-to's and excerpts from the For What It's Worth column reprinted for the first time and completely indexed for easy reference. 172 pages of money-saving ideas.



This 20 page pamphlet was written to acquaint the general public with the sport and hobby of RC. An ideal book for clubs and firms — to be given away at trade shows and contests or for inclusion with radios and kits.

RCM90001	RCM FLIGHT TRAINING COURSE	10.00	10.00
RCM90002	RCM FLIGHT TRAINING COURSE II	10.00	10.00
RCM90003	RCM SCALE REFERENCE GUIDE	4.50	4.50
RCM90004	RCM THE RC ENGINE	3.95	3.95
RCM90005	RCM THE RC ENGINE-VOLUME II	6.95	6.95
RCM90006	RCM SCALE IN HAND	3.50	3.50
RCM90007	RCM FOAM WINGS	3.50	3.50
RCM90011	RCM FOR WHAT IT'S WORTH-VOL IV	6.95	6.95
RCM90012	RCM RC FROM THE GROUND UP	.50	.50

TOWER HOBBIES BOOKS

Harold Cunningham's AIRPLANE SAVING BOOKS

CRASH PREVENTION

The Most Popular And Useful Books Available

TOW90101	TOWER R/C BEGINNER'S BOOK	3.95	3.95
TOW90102	TOWER 'CRASHLESS WAY TO R/C'	4.95	4.95



#TOW90101

CONTENTS:

CHAPTER 1. AIRPLANE SELECTION: How to find that instructor. How to select the trainer. Important building points. ARF models. Proper use of glue. Alignment. Experience in using high performance full house 60 power airplanes as trainers.

CHAPTER 2. SELECTION AND INSTALLATION OF RADIO EQUIPMENT AND CONTROLS: Advantages and disadvantages, Importance of proper mode and instructor. R C frequencies and flags, Installation of hinges – control horns – push rod: preferred types. Points to avoid future trouble in clevis, bellcranks and servo mounting. Tips on prevention of future radio problems. Check systems after installation. Landing gear trouble prevention.

CHAPTER 3. TEST FLYING AND TRIMMING: Checks. Helping the experienced flyer trim your plane. Corrections. Damage repairs. Flying: what to expect. Only 3 things to learn. What to do when the airplane is coming back. Learning coordination of controls.

CHAPTER 4. FLYING – WITHOUT CRASHES: The importance of the instructor. Orientation problems. What to do when confused. Torque problems. Proper landing procedure to learn. Colors – importance in first airplane. Sun problems and weather problems. Flight Logs.

CHAPTER 5. THE POWER PACKAGE – ENGINES AND ACCESSORIES: Safe way to start. Engine break in. Engine mounting. Twin and Wankel engines. Mufflers and pressure systems. Carburetors and adjustments. Fuels and fuel lines, filters, fuel tanks, glow plugs, battery life on glow plugs. Balancing propellers. Propeller sizes. Propeller selections.

CHAPTER 6. CRASH CAUSES AND PREVENTION: Breakdown of causes. Pilot error, servo problems, radio interference, battery problems, and radio problems. Chain of events crashes. Vibrator range checks. Maintenance, Transmitter and receiver range test.

APPENDIX: Practice techniques, Modes, Magazines and Models, Hardware sizes, AMA safety code and membership.



#TOW90102

CONTENTS:

CHAPTER 1. SAFE FLYING TECHNIQUES CRASHES AND PREVENTIONS: Split Second Delay Crashes, Distraction Crashes, Dangerous Aerobatics, Elevator Crashes, Door Damage Crashes, Take-Off Stalls and Problems, Climbing, Landing Turn Stalls, Safe Crosswind Landing Techniques, Improved Landings, Flutter Crashes and Prevention, Mental Attitude Crashes, Interruption Crashes, Hot Airplane Flying, Unusual Event Accidents, Weather and Wing Problems, Turbulence, Emergencies and Unusual Situations, Mid Air Collisions, Danger of Sunshine, Spin Recovery.

CHAPTER 2. TAME THAT DOG: Changes to Make The Airplane Fly Right, For Safe Flying. Unsatisfactory Pitch and Turning Tendencies, Effects of Wrong Center of Gravity, Effects of Wrong Engine Thrust, Improper Dihedral, Effects of Wing Warp, Effects of Excessive Right Engine Thrust, Fin and Rudder Problems, Solving a Turn Trim Problem, Aileron Adjustments, Wings, Shoulder Wing Airplanes, Advantages of Low Wing Aircraft, Horizontal Stabilizer and Thrust Line.

CHAPTER 3. RADIO, BATTERY, AND SERVO CRASH PREVENTION: Range Checks, Glitches and Radio Interference, Receiver Switch Problems, Servo Problems and Failure Prevention, Loose Connections, Damaged Servo Gears, Repairs, Servo Crashes, Servo Direction Reverse, Servo Test, Battery Memory Crashes, ESV, Battery Testing.

CHAPTER 4. ENGINE PROBLEMS STALL AND CRASH PRODUCERS: Fuel Problems and Engine Mixtures. Problems That Make Engines Die in Flight, Glow Plugs, Needle Valve Don'ts, Idle For Safety.

CHAPTER 5. GLIDER FLYING, FLYING WITH LESS CRASHES AND FRUSTRATIONS: Slope Soaring, Hi–Start Launch, Glider Prangs.

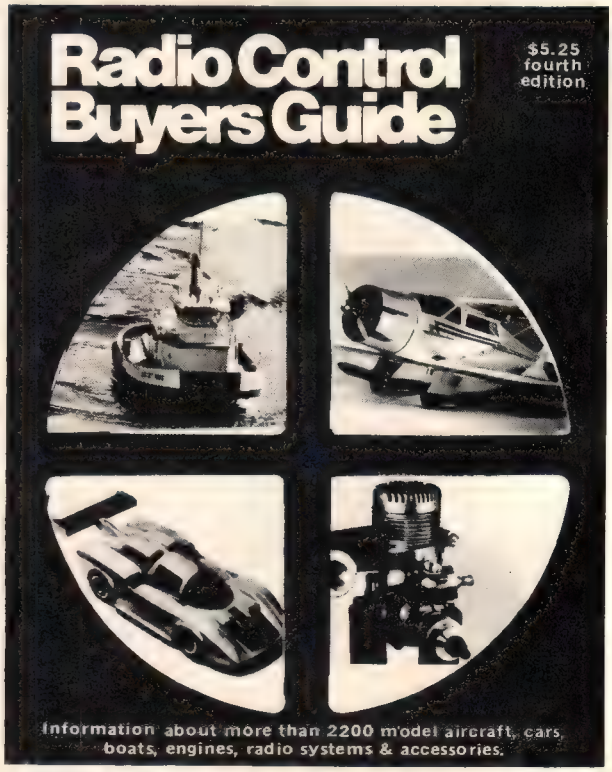
APPENDIX: How To Taxi in Strong Winds, Controls, Radio Control Prop Chart, General Rules, Elevator Operations, Wing Loading Chart, Records.

R/C BUYERS GUIDE

The new 4th edition Your Guide to the R/C world

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BUILDING EQUIPMENT

As it says, this section contains nothing but building equipment. Specifically, it contains all of the tools you will need to build your favorite aircraft.

Ajusto-Jig and Bridi both feature wing jigs that will allow you to build your wings without any warps. Both allow you to bring your wing nearly to completion before they must be removed from the jig. The Ajusto-Jig is more expensive because it will allow you to make a wing with up to a six-foot span, or one six-foot panel; the Bridi jig will allow only up to 35 inches. The Ajusto-Jig also includes a fuselage jig in the "Full-House" version.

If you need clamps, Kraft, Tomco, and X-Acto provide all sorts of clamps for every holding job you'll need. There are a variety of sizes and shapes for each type of task you'd need done.

If you need a vise, we have the Pana-Vise, the X-Acto Mini-Vacu-Vise, and the Dremel D-Vise. If these won't do the job, then you'll just have to go to the hardware store for a heavy-duty model.

For knives and cutting tools, check-out X-Acto, Coverite, and Tower Hobbies. X-Acto has just about every kind of cutter you'd want. Coverite bring its "Trimit" knife, which is designed for trimming any type of covering material. If you just want a knife, then try the Tower Hobbies' #1 knife handle and #11 blades . . . you'd be hard pressed to find a better bargain, especially the way we price them!

Custom Model Products offers its "Z-Pliers". This handy little gadget will allow you to put a "z-bend" in 1/16" wire. This will eliminate having to buy keepers for everything. In addition, it will cleanly cut the wire to any desired length.

Also for bending wire is the Southern R/C Products' "Mr. Muscle" wire bender. This bender will allow you to bend any of the music wire sizes commonly used in R/C modeling. It will even bend nosegear coils! Quite a handy gadget!

Micro-Flame brings us their mini torch sets. If you need to solder music wire, then you need this gem. It allows you to heat the wire to the proper temperature to insure a good solder joint. If you use it with the Sta-Brite silver solder we also handle, you'll get a good, strong solder joint every time. Just great for the landing-gear wire on those ¼-scale ships!

After you've brought your bird to completion, but still short of applying the finishing, you should use the Robart Incidence meter. Its use will insure that the wing and stabilizer are mounted onto the aircraft at just the desired angle with respect to the engine thrust line and to each other. With this tool, you should never have a plane with the wing out of alignment because of an out-of-true wing saddle.

If you need a small sander or grinder, then take a gander at the tools made by Dremel and Powr-Mite. The Dremel tools are familiar to us because we read all about them in all of the model magazines. You can get virtually any time of job done with these tools.

Any type of light grinding, routing, or drilling job can be done with Dremel tools. Their Moto-shop combines a jigsaw with a disc sander and a flexible shaft that will do almost everything their regular Moto-tools will do.

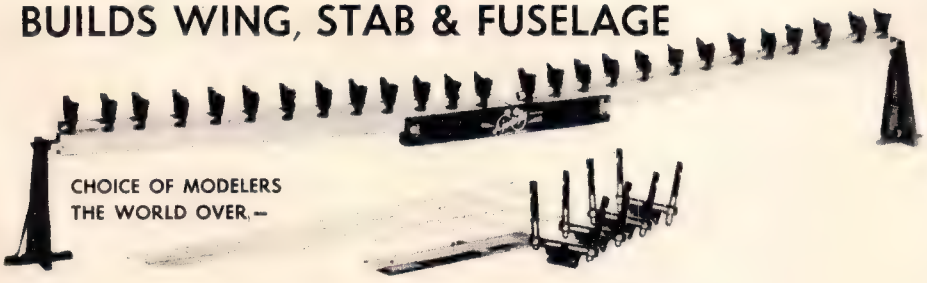
For heavier sanding jobs, the Mathis Powr-Mite sander is what the doctor ordered. It has a small table upon which you can support the work. This table can be set at various angles so that you can put a bevel on anything that will fit.

Wing Manufacturing provides two unique items that are new to Tower Hobbies. These items are their Magic Molder machine, and their Foam Cutting wire. If you need to make custom plastic parts, then you can mold them out of styrene or ABS sheet by using the Magic Molder to Vacu-form them into shape. If you need a special set of foam parts, the Foam Cutting Wire will allow you to make wings, stabilizers, and it will permit the roughing out of many other custom parts . . . wheel pants, cowls, wing tips, and anything your imagination will envision.

Finally, although many will not consider the next series of products building equipment, they *are* needed for most types of model construction. We're talking about the high quality balsa wood produced by Midwest Products. We also handle their spruce in selected sizes, maple motor-mount stock and a variety of plywood sizes.

A-JUSTO-JIG

BUILDS WING, STAB & FUSELAGE



Standard Wing Jig | Fuse-Jig Kit | Full House Wing & Fuse Jig

AJJ33100	A-JUSTO-JIG STANDARD WING JIG	49.95	37.50
AJJ33101	A-JUSTO-JIG WING & FUSE JIG	59.95	44.95
AJJ33202	A-JUSTO-JIG FUSE-JIG KIT	10.00	8.00

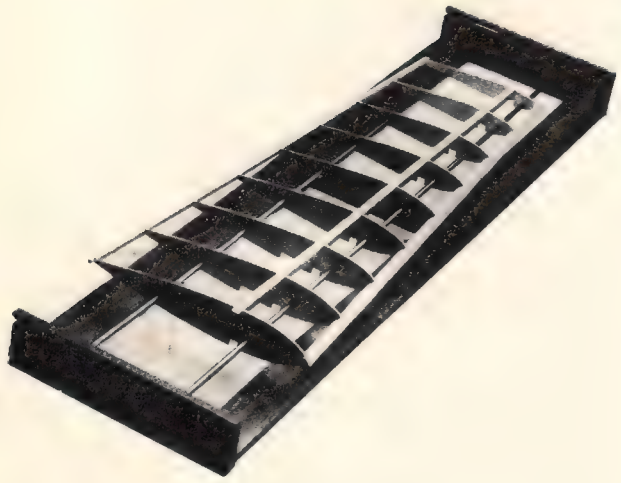
F THEY ARE BUILT BETTER YOU CAN FLY BETTER

The A-JUSTO-JIG holds alignment within .1%. Dihedral is built-in making a better and stronger joint. Rotates 360° to work on the bottom. Your wing is 90% complete when you take it off the Jig so you know it will hold its alignment. The Rib Index Tool locates holes in ribs for the aligning rods even in a tapered wing . . . no guess work. Glider wings can be built one panel at a time up to a length of six feet per panel. Any degree of washout can be built in.

The FUSE-JIG fits on the Wing Jig without tearing down your Wing Jig. The fuselage will turn out as true as the wing . . . a perfect combination.

BRIDI

RCM WING JIG



- OFFERS QUICKER AND EASIER WING CONSTRUCTION
- FAST AND SIMPLE SET-UP
- ELIMINATES WARPED WINGS
- ACCEPTS UP TO 35 in. WING PANEL
- 1/4" STEEL ALIGNMENT RODS
- CENTER ROD SUPPORT

BRI33333 BRIDI WING JIG 15.95 13.55

CUSTOM MODEL PRODUCTS

The addition of Z-Pliers to your workshop tools will speed installation of pushrods, and eliminate solder joints.

Z-Pliers make a neater and more reliable pushrod connection.

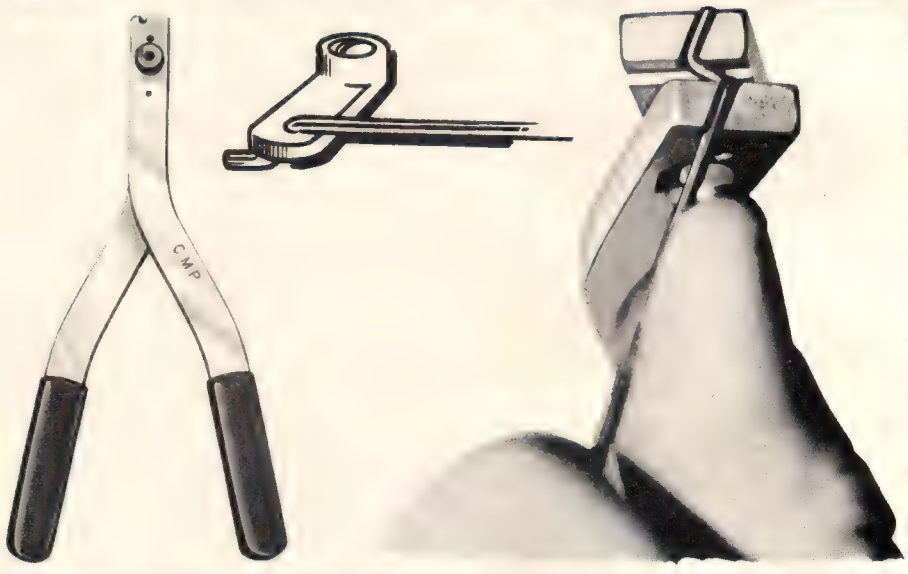
Making Z-bends is no longer an impossible chore.

Z-Pliers also make cutting music wire E-Z.

Cuts 1/16" and 3/32" music wire clean and leaves no burrs.

Made from case hardened steel with cushioned grip handles exclusively by:

Custom Model Products CMP



CMP39000 CUSTOM MODEL PRODUCTS Z-PLIERS 9.95 9.95



COVERITE

TRIMIT—The Trimit is a new tool from Coverite that cuts through Monokote, Solarfilm, Coverite, silk, or tissue, as clean as a razorblade – but lasts far longer. The Trimit blade is multi-faceted like a diamond, which gives it superior sharpness and durability. Recent tests showed that the blade remained sharp after cutting over 300 feet of Coverite. In addition, the underside of this unique tool is curved so that material can be cut without leaving any scars on even the most fragile balsa or foam. The blade is housed in a special T-square shaped head which runs smoothly along the edges of a model (or ruler) producing perfectly straight cuts. If a curved cut is required, the Trimit blade can change direction without tearing material due to its flexible construction. The Trimit comes with a plastic cover so it can be carried safely in a pocket.

COV45000 COVERITE TRIM-IT KNIFE 1.19 .95

DREMEL

DRE34210	DREMEL #210 DRILL PRESS	21.95	18.95	197
DRE34217	DREMEL #217 FOOT SPEED CONTROL	23.95	19.95	197
DRE34219	DREMEL #219 SPEED CONTROL	21.95	18.95	197
DRE34223	DREMEL #2217 MOTO-TOOL HOLDER	14.95	12.95	197
DRE34229	DREMEL #229 ROUTER ATTACHMENT	10.95	9.95	197
DRE34232	DREMEL #232 MOTO FLEX	69.95	52.50	191
DRE34245	DREMEL #245 MOTO TOOL	39.95	31.95	196
DRE34270	DREMEL #270 MOTO TOOL	39.95	31.95	196
DRE34271	DREMEL #271 MOTO TOOL KIT	49.95	39.95	196
DRE34280	DREMEL #280 MOTO TOOL	44.95	35.95	195
DRE34281	DREMEL #281 MOTO TOOL KIT	59.95	46.95	195
DRE34371	DREMEL #371 MOTO TOOL KIT	59.95	46.95	195
DRE34380	DREMEL #380 MOTO TOOL	54.95	42.95	194
DRE34381	DREMEL #381 MOTO TOOL KIT	69.95	52.50	194
DRE34550	DREMEL #550 MOTO-SAW	49.95	39.95	191
DRE34571	DREMEL #571 MOTO-SHOP	69.95	52.50	193
DRE34572	DREMEL #572 DELUXE MOTO-SHOP	89.95	67.50	193
DRE34580	DREMEL #580 TABLE SAW	89.95	67.50	191
DRE34701	DREMEL #701 DELUXE MOTO-LATHE	59.95	46.95	191
DRE34914	DREMEL #2214 D-VISE	21.95	18.95	196
DRE35059	DREMEL #90196 FLEXIBLE SHAFT	13.80	11.95	196
DRE35060	DREMEL #8029 SAW BLADES-FINE	1.10	1.05	196
DRE35061	DREMEL #8030 SAW BLADES-COARSE	1.20	1.15	196
DRE35115	DREMEL #115 STEEL CUTTER	2.50	2.40	196
DRE35193	DREMEL #193 STEEL CUTTER	2.50	2.40	196
DRE35194	DREMEL #194 STEEL CUTTER	2.50	2.40	196
DRE35196	DREMEL #196 STEEL CUTTER	2.50	2.40	196
DRE35402	DREMEL #402 MANDREL	1.10	1.05	196
DRE35408	DREMEL #408 DRUM SANDER BANDS	1.10	1.05	196
DRE35409	DREMEL #409 CUTTING WHEEL	2.60	2.55	196
DRE35411	DREMEL #411 SANDING DISKS	1.35	1.30	196
DRE35432	DREMEL #432 DRUM SANDER BANDS	1.10	1.05	196
DRE35573	DREMEL #573 ACCESSORY PACKAGE	24.95	21.25	193

DREMEL MOTO-LATHE model 701 *Lets Your Imagination Show*



DELUXE MOTO-LATHE MODEL 701

MOTO-LATHE sets up quickly on table, workbench or kitchen counter top. It's compact and light weight (only 9 lbs.). Perfect for apartment, home or workshop use. Requires only 6″ x 18″ of space in the closet or storage cabinet. A 16-page "How-To" manual gets you started quickly and easily.

MOTO-LATHE does both spindle and face plate turnings. A handy, built-in drive center shaft lock makes it easy to remove and attach headstock centers and face plate in minutes.

MOTO-LATHE is powered by a husky 1.4 amp, 115 V, 60 Hz. AC motor which runs quietly at 3,450 RPM . . . a perfect speed to complete miniature masterpieces quickly and with precision. Will not interfere with TV or radio reception.

DREMEL MOTO-SAW model 550

Safe, Versatile for Home and Shop



MOTO-SAW MODEL 550

Great, low priced hobby, craft and home tool. Make or repair models, mini furniture, pull toys. Perfect for home projects.

An exciting new budget-priced, portable scroll saw with 12″ throat capacity. Easy to use and safe . . . cuts intricate craft patterns, soft wood up to 1½″ thick, hard wood ¾″, Plexiglas, styrofoam, thin gauge metals and leather.

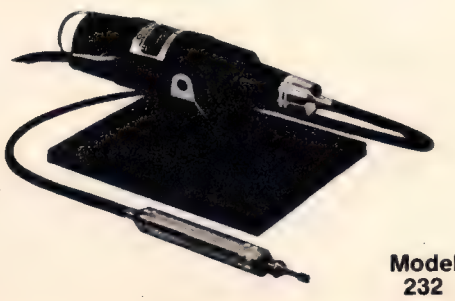
MOTO-SAW helps make your creative ideas a reality. It saws quickly and easily with professional looking results.

Light weight (only 9 lbs.) and compact, it can be taken to the job and set up on table top, card table or bench. Ideal for apartment or home. Stores in only a 8⅝″ by 18″ space.

MOTO-SAW has a quiet running 3,450 RPM, 115 V, 60 Hz, AC motor. Long life oil impregnated bronze bearings. Will not interfere with TV or radio reception.

DREMEL MOTO-FLEX TOOL

Cool Running Powerful Model 232



Model 232

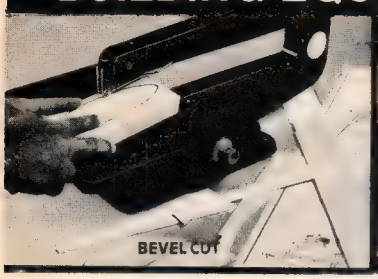
The powerful new, miniature high speed flexible shaft tool with "sure" finger tip control . . . the new Dremel MOTO-FLEX TOOL

It adds a new creative dimension to working . . . in wood, plastics, gems, rocks, leather, glass, minerals, metals and ceramics. Now you can grind, polish, slot, deburr, sand, carve, sharpen, texturize, rout, cut, and engrave . . . with speed, power and precision.

Features a cool running, slim grip ball bearing handpiece, 25,000 RPM motor, and 34″ long vinyl covered flexible shaft. Handy to get into those hard-to-reach spots.

Beginner and professional alike will enjoy this new Dremel creative power tool.

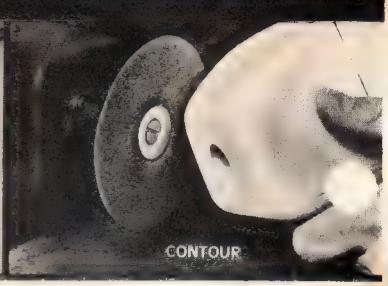
It can be bench mounted on a 360° swivel base or wall mounted with handy hanger bracket.





IT'S A SCROLL SAW





IT'S A DISC SANDER

DREMEL® MOTO-SHOP®

The complete multi-purpose workshop

• 15" SCROLL SAW/WORKSHOP COMBINATION • STRONG, RELIABLE 3450 RPM BALL-BEARING MOTOR • POWER TAKE-OFF FOR OVER 100 ATTACHMENTS AND ACCESSORIES • TABLE TILTS 45° RIGHT OR LEFT FOR BEVEL CUTTING

Why struggle with a lot of different power tools, when the Moto-Shop alone does it all? It's a 15-inch scroll saw with power takeoff that converts to all the tools shown above. Lets you handle simple projects or big jobs with ease and precision. As a scroll saw, it handles everything from small scroll work to full size furniture work. As a disc sander, it shapes, sands rough edges, trues uneven surfaces. As a buffing wheel, its many uses include polishing jewelry, silverware, golf clubs. And as a flexible shaft tool, it's handy for grinding, drilling, carving, shaping.

The Moto-Shop is compact. It sets up easily on any table or workbench, and can be stored in a closet, under a workbench, etc.

Safe and easy for beginners to use. Powerful and accurate for skilled craftsmen. Great for women and youngsters, too. You'll call it the best power tool investment you ever made.

APPLICATIONS

Handle everything from small, precision scroll cutting to full size furniture work. Cuts standard 2 x 4's, non-ferrous metals, plastic, tile, styrofoam, face brick and much more. Handy sanding discs for shaping and finishing hobby, craft, do-it-yourself projects. Use it to bevel cut, carve, scroll cut, grind and drill.

FEATURES

1. BLADE TENSION LEVER—
Cam action keeps blade taut. No tension spring to adjust. Change blades quickly.
2. 3-WAY BLADE HOLDER—
Turn blade to right or left to handle extra long stock.
3. BLADE GUARD—
Blade guard also acts to hold workpiece.
4. ADJUSTABLE TABLE—
Table adjusts up or down, makes new sections of blade available for cutting to extend blade life.
5. BALL BEARING ROTARY MOTOR—
115V, 60 cycle AC., 3450 RPM. Will not interfere with radio, TV.
6. POWER TAKEOFF—
For utilizing accessories to carve, grind, sand and polish.
7. TILTING TABLE—
Table tilts to 45° for bevel cutting.
8. DIRECT DRIVE BLADE ACTION—
Increases cutting power, reduces vibration and blade breakage.

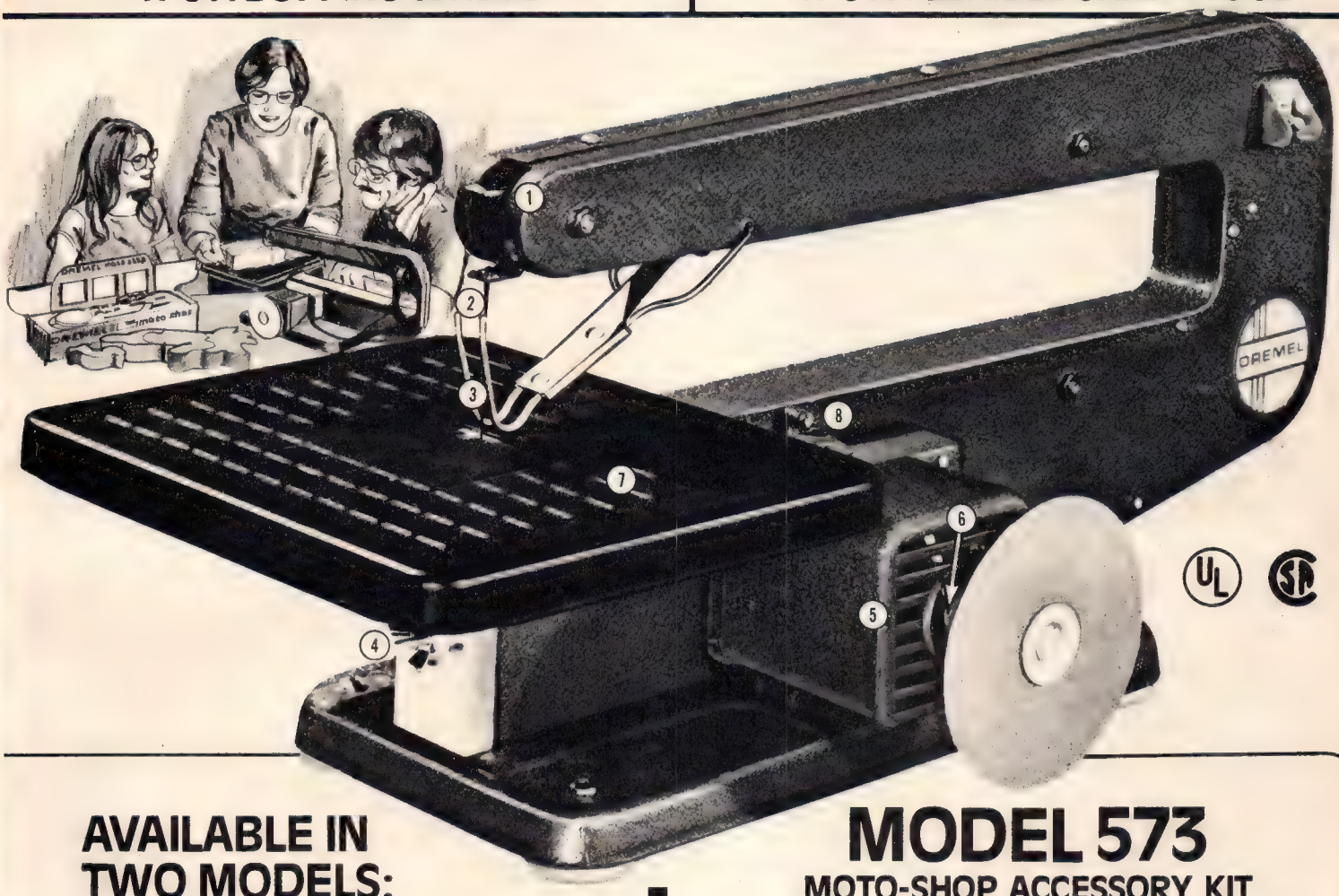
SPECIFICATIONS

- Model 571
- Weight ..... 12 lbs., 7 oz.
- Motor ..... Shaded pole induction type
- Amps 1.4
- Strokes ..... 3450 SPM
- Volts ..... 115V, 60 Hz. AC
- Bearings ..... Ball bearings
- Throat capacity ..... 15"
- Size ..... 23"L x 9¼"W x 9½"H
- Cutting capacity ..... Straight or bevel, material up to 1⅝" thick
- Power takeoff ..... Direct drive 3450 RPM centrifugal and shoulder coupling
- Grounding ..... 3-wire plug



IT'S A BUFFING WHEEL

IT'S A FLEXIBLE SHAFT TOOL



AVAILABLE IN TWO MODELS:

MODEL 571

Scroll Saw/Sander Combination

Includes No. 571 Moto-Shop with rubber backing pad and adapter, three sanding discs, four blades. Other attachments available for added flexibility.

Model 572

Deluxe Moto-Shop Scroll Saw/Sander Combination

Includes 571 Moto-Shop with rubber backing and adapter, nine saw blades, six sanding discs, one cloth wheel, one wire brush, one polishing compound stick, one flexible shaft and 12-piece accessory set.

MODEL 573

MOTO-SHOP ACCESSORY KIT

Contains everything you need to do a fantastic variety of creative jobs including carving, drilling, sharpening, deburring, sanding and grinding.

KIT CONTENTS

- 1 flexible shaft
- 1 drum sander and 4 sander bands
- 5 saw blades
- 2 emery wheel points
- 1 high speed cutter
- 1 drill bit
- 3 collets
- 1 wrench
- 1 polishing compound stick
- 3 sanding discs
- 1 wire brush
- 1 silicon point
- 1 buffing wheel
- 1 arbor adapter
- 2 bristle brushes



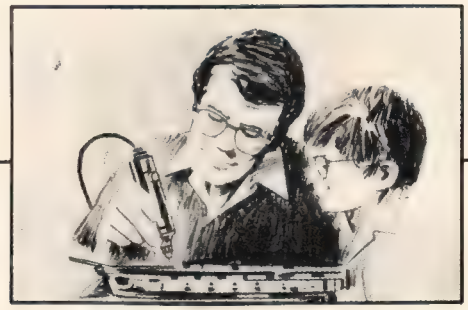


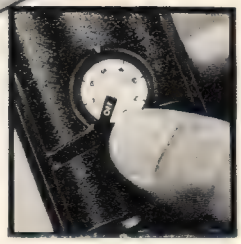
MODEL 381

Heavy Duty Variable Speed Moto-Tool Kit With 34 Accessories

(100% Ball Bearing Construction)

(For tool only, specify Model 380)





Fingertip speed control
5000 through 25,000 RPM

DIAL THE SPEED TO FIT THE NEED.
Dial slow speeds for: soft or fragile materials, intricate carving, deep drilling.
Dial fast speeds for: routing jobs, shaping edges, grinding, engraving, cutting.

APPLICATIONS

There is a wide variety of creative jobs you can handle with the Model 381, our very finest Moto-Tool kit. Carve, grind, polish, sand, drill, engrave, cut, deburr, and more. Work in wood, stone, plastics, leather—even metals. You'll handle everything from rough shaping to intricate detail work with speed, ease and accuracy. Also great for woodcarving and lapidary.

FEATURES

- Ball bearing construction for long life, smooth operation.
- Compact, well balanced for effortless handling.
- Impact resistant housing.
- Permanent magnet motor provides steady, dependable power.

SPECIFICATIONS

- Model .....380 (tool only)/381 Kit
- Weight .....1 lb., 2 oz.
- Motor .....Universal permanent magnet field
- Control .....Variable speed
- Amps .....0.75 Low speed
  0.9 High speed
- Speed .....5000 thru 25,000 RPM
- Volts .....115V, 60 Hz. AC
- Bearings ..... Ball bearings
- Collets available .....1/8", 3/32", 1/16", 1/32"
- Grounding .....3-wire plug

DREMEL

KIT CONTENTS

- Model 380 Moto-Tool with ⅛" collet
- 1 wrench
- 3 cutoff wheels
- 7 disc sanders
- 1 felt wheel (½")
- 1 high speed twist drill
- 1 high speed cutter
- 2 mandrels
- 3 bristle brushes
- 1 drum sander
- 3 coarse sander bands
- 1 dressing stone
- 1 felt polishing wheel (1")
- 1 collet (3/32")
- 7 mounted wheel points
- 1 storage box

(SUBSTITUTIONS OF ACCESSORIES OF EQUAL OR GREATER VALUE MAY BE MADE)

DREMEL





Variable speed Moto-Tool kit with 34 accessories

MODEL 371

APPLICATIONS

Perfect for hobbies, crafts work, wood carving, lapidary, do-it-yourself projects. Carve, grind, polish, sand, drill, engrave, deburr. Work in wood, stone, plastics, leather—even metals.

FEATURES

- Impact resistant housing.
- Permanent magnet motor for steady power, smooth operation.
- External brushes for easy replacement.
- Lifetime lubricated sleeve bearings.

SPECIFICATIONS

- Model ..... 370 (tool only)/371 Kit
- Weight ..... 1lb., 3 oz.
- Motor ..... Universal permanent magnet field
- Control ..... Variable speed
- Amps ..... 0.75 Low peed / 0.9 High speed
- Speed ..... 5000 thru 25,000 RPM
- Volts ..... 115V, 60 Hz. AC
- Bearings ..... Bronze sleeve
- Collets available ..... 1/8", 3/32", 1/16", 1/32"
- Ground ..... 3-wire plug

KIT CONTENTS

- Model 370 Moto-Tool with ⅛" collet
- 1 wrench
- 3 cutoff wheels
- 7 disc sanders
- 1 felt wheel (½")
- 1 high speed twist drill
- 1 high speed cutter
- 2 mandrels
- 3 bristle brushes
- 1 drum sander
- 3 coarse sander bands
- 1 dressing stone
- 1 polishing wheel (1")
- 1 collet (3/32")
- 7 mounted wheel points
- 1 storage box

(SUBSTITUTIONS OF ACCESSORIES OF EQUAL OR GREATER VALUE MAY BE MADE)



Heavy duty 100% ball bearing construction constant speed Moto-Tool kit with 34 accessories

(For tool only, specify Model 280)

MODEL 281

APPLICATIONS

Ideal for wood carving, shaping, routing, drilling, sanding, polishing. Work in wood, plastics, metal, leather. Use it for all your crafts, hobby and do-it-yourself projects.

FEATURES

- 30,000 RPM reliable permanent magnet motor.
- Impact resistant housing.
- Ball bearing construction.

SPECIFICATIONS

- Model ..... 280 (tool only) /281 Kit
- Weight ..... 1lb., 2 oz.
- Motor ..... Universal permanent magnet field
- Control ..... On/Off
- Amps 0.9
- Speed ..... 30,000 RPM
- Volts ..... 115V, 60 Hz. AC
- Bearings ..... Ball bearings
- Collets available ..... 1/8", 3/32", 1/16", 1/32"
- Grounding ..... 3-wire plug

KIT CONTENTS

- Model 280 Moto-Tool with ⅛" collet
- 1 wrench
- 3 cutoff wheels
- 7 disc sanders
- 1 felt wheel (½")
- 1 high speed twist drill
- 1 high speed cutter
- 2 mandrels
- 3 bristle brushes
- 1 drum sander
- 3 coarse sander bands
- 1 dressing stone
- 1 felt polishing wheel (1")
- 1 collet (3/32")
- 7 mounted wheel points
- 1 storage box

(SUBSTITUTIONS OF ACCESSORIES OF EQUAL OR GREATER VALUE MAY BE MADE)

DREMEL



MODEL 271

Constant speed Moto-Tool kit with 34 accessories

(For tool only, specify Model 270)

APPLICATIONS

Handy for most hobby, craft and do-it-yourself applications. Fine balance of speed, power and precision for work in a wide range of materials.

FEATURES

- Reliable, permanent magnet motor delivers 30,000 RPM.
- Permanently lubricated bronze sleeve bearings.
- Rugged, lightweight housing.
- Compact, well balanced for effortless handling.

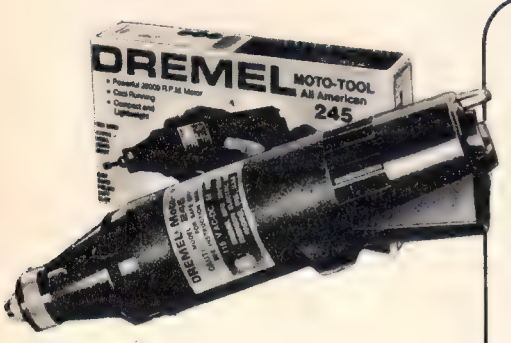
SPECIFICATIONS

- Model .....270 (tool only) /271 Kit
- Weight .....1lb., 2oz.
- Motor .....Universal permanent magnet field
- Control .....On/Off
- Amps 0.8
- Speed .....30,000 RPM
- Volts .....115V, 60 Hz. AC
- Bearings .....Bronze sleeve
- Collets available .....1/8", 3/32", 1/16", 1/32"
- Grounding .....3-wire plug

KIT CONTENTS

- Model 270 Moto-Tool with 1/8" collet
- 1 wrench
- 3 cutoff wheels
- 7 disc sanders
- 1 felt wheel (½")
- 1 high speed twist drill
- 1 high speed cutter
- 2 mandrels
- 3 bristle brushes
- 1 drum sander
- 3 coarse sander bands
- 1 dressing stone
- 1 felt polishing wheel (1")
- 1 collet (3/32")
- 7 mounted wheel points
- 1 storage box

(SUBSTITUTIONS OF ACCESSORIES OF EQUAL OR GREATER VALUE MAY BE MADE)



MODEL 245

Constant speed Moto-Tool kit with 13 accessories

APPLICATIONS

An excellent hand grinder kit value that includes 13 popular accessories that let you grind, drill, sand, polish, slot and more. Motor generates 26,000 RPM for working with wood, plastics, metal.

FEATURES

- Lightweight, impact-resistant housing.
- Series wound motor provides steady, reliable power.
- Handy, built-in hanger.
- Self-contained shaft lock pin for fast accessory changing.

SPECIFICATIONS

- Model .....245 Kit
- Weight .....15oz.
- Motor .....Series wound
- Amps 0.6
- Speed .....26,000 RPM
- Volts .....115V, 60 Hz. AC
- Bearings .....Bronze sleeve
- Collets available .....1/8", 3/32", 1/16", 1/32"
- Grounding .....3-wire plug

KIT CONTENTS

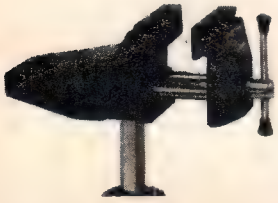
- Model 245 Moto-Tool with 1/8" collet
- 1 wrench
- 3 emery cutoff wheels
- 3 sanding discs
- 2 mandrels
- 1 grinding wheel
- 1 felt polishing wheel (1")
- 1 emery wheel point
- 1 high speed 1/8" drill

(SUBSTITUTIONS OF ACCESSORIES OF EQUAL OR GREATER VALUE MAY BE MADE)

D-vise™ by Dremel

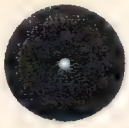
HOLDS THE WORK EXACTLY WHERE YOU WANT IT.

- 2½" jaw opening, 2¾" jaw width for many different sized workpieces.
- Spring loaded handle stays out of the way of work.
- Soft jaw pads protect delicate work and fine finishes.



Precision machined slide rods provide parallel equally applied jaw pressure.

MOTO-TOOL AND MOTO-SHOP ACCESSORIES





Flexible Shaft...the key to your Moto-Shop's versatility.



Drum Sander Bands
½" dia. coarse grit—No. 408
½" dia. fine grit—No. 432

CUTTING WHEEL No. 409
A handy emery wheel for slicing, cutting-off and similar operations. 36 discs per package.



193 194 196 115 MANDRELS—1/8" Shank



402



SAW BLADES—
No. 8029—Fine tooth blades, pack of 5
No. 8030—Coarse tooth blades, pack of 5



SANDING DISCS
No. 411—36 sanding discs, coarse, ¾" dia.



FOOT OPERATED MODEL NO. 217



TABLE MODEL NO. 219

SPEED CONTROLS No. 217 and No. 219

APPLICATIONS

Adjusts the speed of the Moto-Tool or Moto-Flex Tool from 0 to full RPM. Also provides exacting control of glue gun, soldering iron and other UL approved tools to 5 amps.

FEATURES

- Fuse protects against overload and tool damage.
- Accepts double insulated or 3-wire tools.
- Solid state triac control prevents power loss and heat buildup.



USE WITH 245, 260, 270, 280 MOTO-TOOLS.



USE WITH DREMEL 232 MOTO-FLEX TOOL.



REGULATE SOLDERING IRONS, GLUE GUNS.

DREMEL



DRILL PRESS STAND No. 210

APPLICATIONS

Converts Moto-Tool into a precision drill press when accurate drilling is a must. Also changes Moto-Tool into a fixed overhead router for routing or relief carving. (Special adapter required for Moto-Tool Model 260)

FEATURES

- 4" x 4" table.
- Tool travel is 0" to 6".
- ¾" maximum table travel.
- Table height adjustment dial and table height lock.
- Table slotted for clamps.
- 12" high, 3" throat.

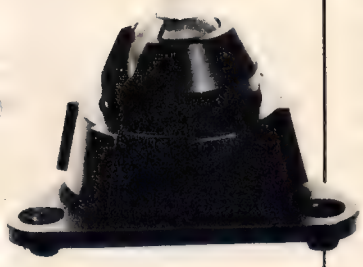


FOR PRECISION DRILLING

MOTO-TOOL® ATTACHMENTS

Increase the versatility of your Moto-Tool





MOTO-TOOL HOLDER No. 2217

APPLICATIONS

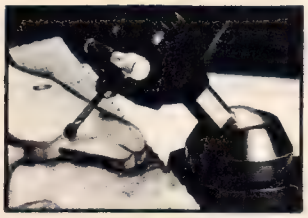
Locks Moto-Tool in any position, so workpiece can be controlled with both hands. (Special adapter required for Moto-Tool Model 260)

FEATURES

- Adjust quickly to any angle around a 180° vertical plane and a 360° horizontal axis.
- Position locks instantly with a simple twist of base ring.



LAPIDARY WORK



WOOD CARVING

ROUTER ATTACHMENT No. 229

APPLICATIONS

Turns any Moto-Tool into a handy mini-router (special adapter required for Moto-Tool 260). Also dadoes, rabbets and chamfers. Uses special Dremel router bits or high speed cutters (see page 9).

FEATURES

- Removable edge guide for free-hand routing on large work.
- Calibrated depth control.
- Maximum ⅜" adjustable depth.





FREE-HAND ROUT



modeler's clamps

Molded glass reinforced nylon clamps with tension provided by rubber bands. They can be adapted to a variety of construction techniques and glue will not stick readily to them.

Now featuring movable jaws to permit offset clamping, clamping non-parallel surfaces, and clamping in recessed areas. The ideal miniature clamp for hobby workshop, home, or general light mechanical use.



Pair of small clamps #KRA33104

One large clamp #KRA33106

NOTE: Small clamps open up 1¼"
Large clamp opens up 4"



KRA33104	KRAFT 200-104 1-1/4 CLAMPS (2)	1.79	1.70
KRA33106	KRAFT 200-106 4 IN CLAMP	1.49	1.40

microflame

Miniature Gas Torch

- Great for Hobbies and Household Repairs
- 30 Piece Hardware Kit
- Lifelong Plastic Carrying Case

5000°F pin point flame



The Microflame Hardware Torch Kit #4400



About the Microflame Torch

The Microflame Miniature Gas Welding Torch is a brazing and soldering tool which develops a 5000°F (2760°C) pin point flame using a mixture of Micronox™ and Butane gases in small, disposable cylinders. The Torch gives the user instantaneous and precise heat only where he or she needs it.

About the size of a pack of cigarettes, this completely self-contained miniature torch is the perfect tool for most lightweight brazing and soldering projects. A must addition to the home or shop work bench.

Designed especially for the hobbyist, craftsperson, home or apartment handyman, shop and office repairman, jeweler and metal sculptor, as well as the lab technician. The Microflame Miniature Torch gives the amateur, or professional, satisfactory results. Fitting neatly into pocket or tool box when not in use, the Microflame measure of portability, combined with its ease of use, truly makes it a multi-purpose tool.

This New 30-Piece Kit answers the call from dealers and users alike, who have been urging us to package the unique and useful Microflame Torch in a Hardware designed box. Now the Home Repairman and Saturday Mr. Fixit will have a permanent storage and carrying case for his or her own Miniature Gas Torch. Packed in a durable, yet attractive, molded plastic case, the Torch and accessories fit neatly into their own recessed compartments.

Each #4400 Torch Kit Contains: Miniature Torch, 6 Micronox™ Cylinders, 3 Butane Cylinders, 12 Brazing Rods, Tube of Flux, 2 Flame Tips, 1 Butane Tip, Spark Lighter, 2 Extra Gaskets and Complete Operating Instructions.

#1001 & #1002

A back-up inventory of these color-keyed, two-pack boxes of Micronox™ and Butane gas cylinders will ensure the torch owner a continuous supply of gases in order to fire up his Microflame torch.



#3100



This accessory kit has everything you need for all types of brazing and soldering projects. Kit contains: 12, 1/32"x6" (.79mm x 152 mm) silver alloy brazing rods, 6, 1/16"x6" (1.59 mm x 152 mm) aluminum brazing rods, containers of silver solder and aluminum flux, brush applicator, sandpaper, a heat resistant working surface and complete instructions.

MFL39000	MICROFLAME 4400 DLX WELD KIT	35.95	30.75
MFL39001	MICROFLAME 1001 MICRONOX	1.99	1.90
MFL39002	MICROFLAME 1002 BUTANE	1.99	1.90
MFL39100	MICROFLAME 3100 BRAZ ROD KIT	5.99	5.40

MIDWEST

Build it right from the start!

Use Midwest Micro-Cut Balsa and Hardwoods.

Here is precision and quality you can see and feel! We purchase only the finest woods available and inspect it five times to make sure you get only the very best. Micrometers are commonplace at Midwest to assure precision Micro-Cut quality!

So no matter what you are building – you can build it right from the start with Midwest Micro-Cut Balsa and Hardwood. Get Micro-Cut precision woods today at your favorite hobby or craft supply store! You deserve the best!



Each description line will state the material (such as balsa, plywood etc.) followed by the dimensions, and then in parenthesis is the number of pieces per bundle.

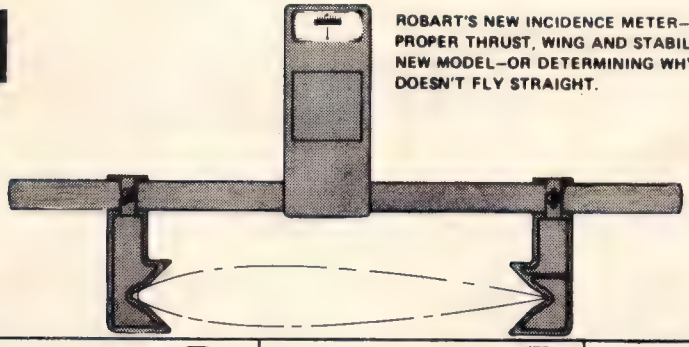
MID38005	BALSA 1/4 X 1/2 X 36 (20)	7.00	6.30
MID38015	BALSA 1/4 X 1/4 X 36 (28)	7.00	6.30
MID38055	BALSA 1/16 X 3 X 36 (10)	7.00	6.30
MID38057	BALSA 3/32 X 3 X 36 (10)	8.50	7.65
MID38060	BALSA 1/8 X 3 X 36 (5)	5.00	4.50
MID38062	BALSA 3/16 X 3 X 36 (5)	6.00	5.45
MID38065	BALSA 1/4 X 3 X 36 (5)	7.00	6.30
MID38075	BALSA 1/16 X 4 X 36 (10)	11.50	10.35
MID38077	BALSA 3/32 X 4 X 36 (5)	6.25	5.70
MID38080	BALSA 1/8 X 4 X 36 (5)	7.50	6.75
MID38082	BALSA 3/16 X 4 X 36 (5)	10.75	9.65
MID38085	BALSA 1/4 X 4 X 36 (5)	10.50	9.45
MID38110	SPRUCE 3/16 X 1/2 X 36 (24)	7.00	6.30
MID38115	SPRUCE 1/4 X 1/4 X 36 (28)	7.00	6.30
MID38120	SPRUCE 1/4 X 1/2 X 36 (20)	7.00	6.30
MID38210	TRIANGULAR STOCK 1/2 X 36 (10)	5.50	4.95
MID38220	TRAILING EDGE 1 X 36 (10)	6.00	5.45
MID38225	TRAILING EDGE 1-1/2 X 36 (10)	7.00	6.30
MID38235	MAPLE 3/8 X 3/8 X 18 (6)	3.90	3.50
MID38240	MAPLE 3/8 X 1/2 X 18 (6)	4.20	3.80
MID38245	MAPLE 3/8 X 3/4 X 18 (6)	4.80	4.30
MID38310	PLYWOOD 1/32 X 6 X 12 (6)	4.80	4.30
MID38315	PLYWOOD 1/16 X 6 X 12 (6)	5.10	4.60
MID38320	PLYWOOD 1/8 X 6 X 12 (3)	3.60	3.25
MID38325	PLYWOOD 1/4 X 6 X 12 (3)	3.60	3.25

ROBART

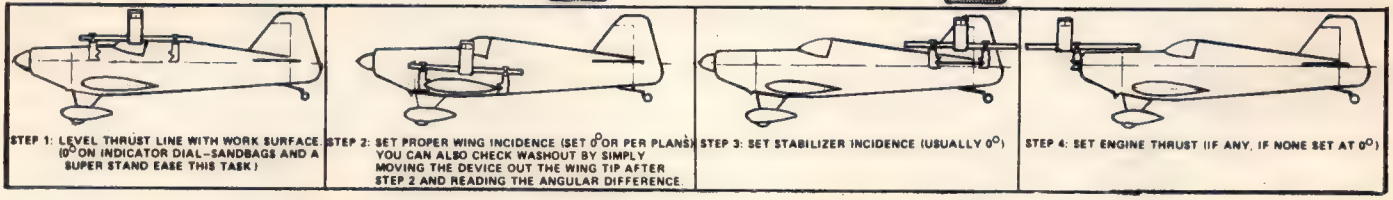
NEW

Model Incidence Meter

PAT PEND



ROBART'S NEW INCIDENCE METER--A MUST FOR SETTING PROPER THRUST, WING AND STABILIZER INCIDENCE ON A NEW MODEL–OR DETERMINING WHY YOUR PRESENT MODEL DOESN'T FLY STRAIGHT.



STEP 1: LEVEL THRUST LINE WITH WORK SURFACE. (0° ON INDICATOR DIAL–SANDBAGS AND A SUPER STAND EASE THIS TASK)

STEP 2: SET PROPER WING INCIDENCE (SET 0° OR PER PLANS) YOU CAN ALSO CHECK WASHOUT BY SIMPLY MOVING THE DEVICE OUT THE WING TIP AFTER STEP 2 AND READING THE ANGULAR DIFFERENCE.

STEP 3: SET STABILIZER INCIDENCE (USUALLY 0°)

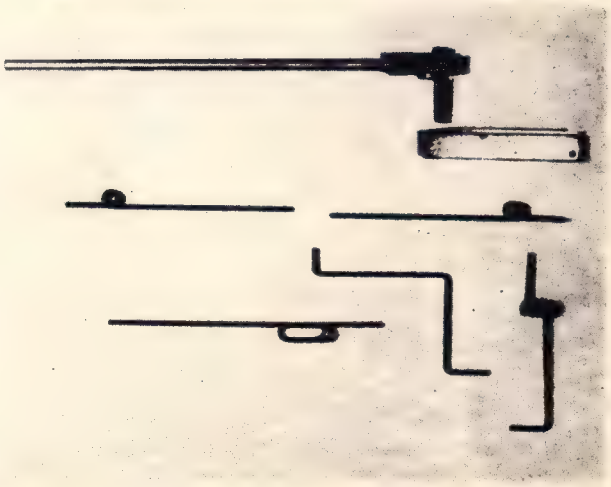
STEP 4: SET ENGINE THRUST (IF ANY, IF NONE SET AT 0°)

ROB39000 ROBART INCIDENCE METER 13.95 10.95

MR. MUSCLE

SOUTHERN R/C

Mr. Muscle is a heavy duty wire bender that can be used to form 5/32 music wire struts for both fixed and retract landing gears. The modeler is no longer limited by the wire forms he can buy. With Mr. Muscle, he can bend left or right hand coils (5/16 I.D.) or right angles easily to meet his own specific needs. Mr. Muscle also serves as an accurate cut-off jig for 5/32" diameter wires. A sturdy bench mounted vise is recommended when using Mr. Muscle, but a drill press vise bolted or clamped to a bench is quite satisfactory.



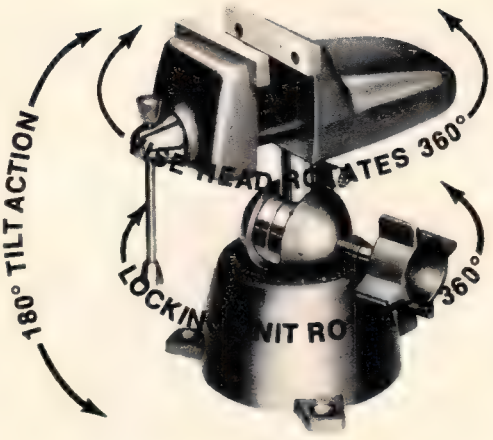
SRC20001 SOUTHERN RC MR. MUSCLE 14.50 11.90

PANAVISE

PANAVISE®

It's like no other tool you've ever used. Its head rotates a full 360 degrees—and tilts 180 degrees from vertical to horizontal. Imagine how that kind of versatility simplifies work procedures, just one convenient knob locks work in any desired position, firmly yet gently.

Over the years this unique concept has grown into a system employed worldwide by scientific and industrial companies. Today PANAVISE offers a variety of interchangeable work holding heads, bases and accessories for every imaginable function. But, just because it's small, doesn't mean you can't use PANAVISE for some pretty rugged work. It's a vise every craftsman deserves.



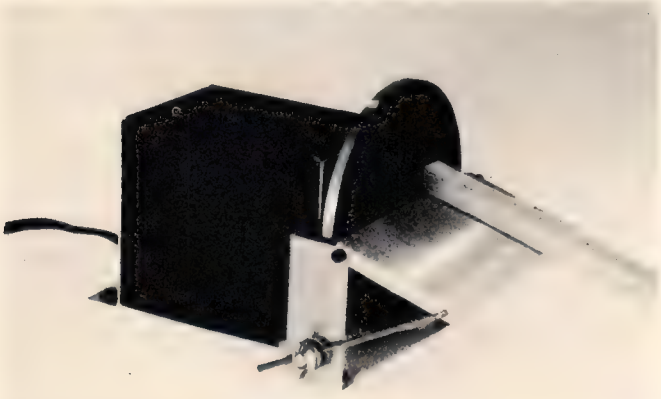
BETTER THAN A THIRD HAND!

TURNS AND TILTS TO ANY POSITION MODEL 301 (left) illustrates four functional design features that make PANAVISE® work holder tool systems the most versatile in the world. (1) The stem of the vertical vise head turns full-circle within the ⅝" (1.59 cm) throat of the "locking unit" in the base. (2) This locking unit also permits the vise head to be tilted 90° in any direction (180° tilt action). (3) The housing containing the "locking unit" also rotates full-circle. (4) All these movements are controlled by one variable-pressure knob, making it possible to move the work at any desired drag-tension, or to lock it firmly, at any position, any angle, facing any direction around the base.

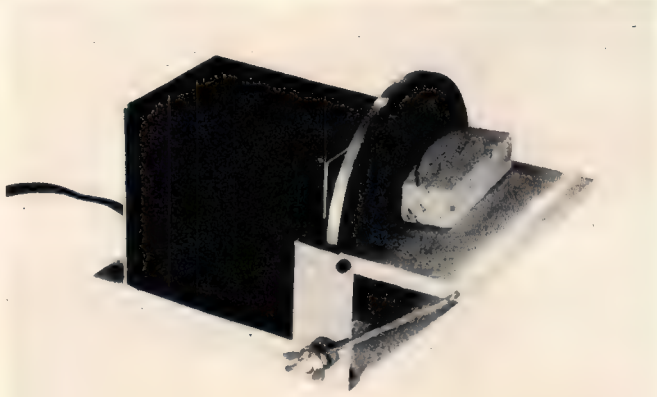
PAN39301 PANAVISE MODEL 301 VISE 21.95 17.95

POWR-MITE

Adjustable table permits sanding precise angles.



Here a curved block is sanded to shape.



MATHES POWR-MITE SANDER

- A compact, high quality bench model disc sander for general hobby use.
- Fully adjustable, positive lock, precision machined tilt table, large (over 12 square inches) sanding area. 120 VAC, direct drive, no belts or gears to wear or replace.
- UL approved motor.
- One year parts warranty

POW39000 POWR-MITE H.D. ELECTRIC SANDER 34.95 29.95

STAY-BRITE

Stay-Brite solders most metals including:

stainless steel	
monel	**nickel**
chrome	**coated steels**
brass	**bronze**
copper	**black steel**
galvanized	**silver**
steel	**platinum**
gold	**cast iron**

For best results use with Stay-Clean Soldering Flux



Stay-Brite silver solder Five times stronger than ordinary solder.

Flows free and smooth, solders all metals.

Silver provides better electrical conductivity.

Vibration resistant, will not crack in service.

Elongation of 48% Stay-Brite stretches under high pressure, won't break under constant pressure.

High strength silver bearing solder melts and flows at 430°F. Provides strength without distortion caused by high temperature brazing.

Tensile strength 10,000 to 25,000 P.S.I. Elongation: 48%. Vibration resistant.

Stay-Brite conforms to Food Administration requirements for use in food processing, accepted by the National Sanitation Foundation. Retains its bright finish, similar to stainless steel.

SSS90000 STA-BRITE SILVER SOLDER 3.25 3.10

TOMCO

HOLDiT! Adjustable Clamp

Features a patented cam lock that allows locking anywhere along the bar.

Model No. 3
#TOM33003
¼" wide jaws open up to 3" opening. 4 clamps per package.
Model No. 6
#TOM33006
3/8" wide jaws open up to 6" opening. 2 clamps per package.

The HOLDIT! Adjustable Clamp has proven to be a great help to the hobbyist, handyman and professional craftsman when gluing, pasting, soldering, laminating, or painting things that need to be held together or in place. Model No. 6 has an adjustable clamping capability to 6" maximum.
2 clamps per package.

Model No. 3 has an adjustable clamping capability to 3" maximum.
4 clamps per package.

TOM33003 TOMCO 3 IN.(4) CLAMPS MODEL #3 2.29 2.25
TOM33006 TOMCO 6 IN.(2) CLAMPS MODEL #6 1.89 1.85

TOWER HOBBIES

PRECISION INSTRUMENTS

TOWER PRECISION BLADE HANDLE

5-blade tube





Now available for the first time is the Tower Hobbies Precision Instrument line. Featuring absolutely the finest quality, the Precision Line comes in the extremely useful #11 and #16 sizes. Both the #11 and #16 blades are .020" thick and are made of the finest carbon steel available. They are heat treated for unbelievable hardness and are formed, honed, and ground with precision equipment to obtain the sharpest edge possible. To compliment these precision blades, we have an all aluminum blade handle that is knurled at the base for positive grip. Fits both blades.

PRECISION HOBBY BLADE HANDLE #TOW37001
PRECISION #11 BALDES (5 per tube) #TOW37011

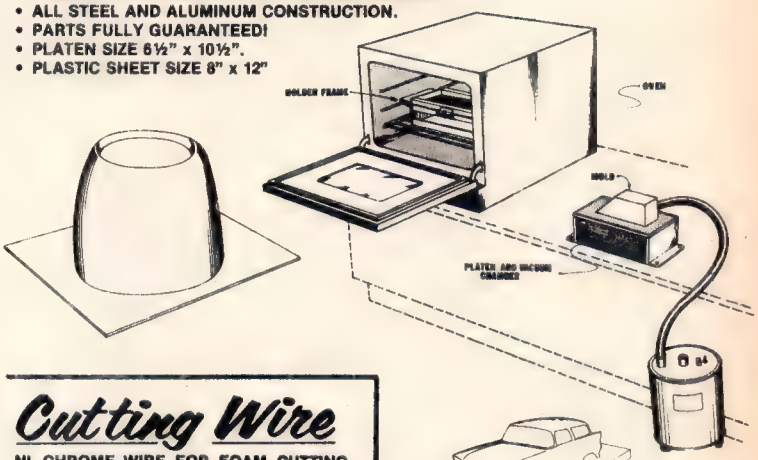
TOW37001 TOWER PRECISION BLADE HANDLE#1 1.10 .75
TOW37011 TOWER PRECISION #11 BLADES (5) .80 .55

WING MFG.

New! MAGIC MOLDER

NOW FOR THE FIRST TIME, YOU CAN MAKE BEAUTIFUL PLASTIC PARTS IN YOUR SHOP WITHOUT EXPENSIVE EQUIPMENT. ALL YOU NEED IS AN OVEN AND A SHOP VACUUM CLEANER AND YOU'RE READY TO GO. THE MAGIC MOLDER CAN BE USED WITH WOOD, PLASTER, METAL OR PLASTIC MOLDS. REPRODUCE ANYTHING IN MINUTES. CREATE YOUR OWN DESIGNS AND FORM THEM IN PLASTIC. MOLDS ALL TYPES OF CLEAR AND COLORED PLASTICS IN THICKNESSES UP TO 1/8". YOUR OWN IMAGINATION IS THE ONLY LIMIT TO WHAT YOU CAN DO WITH THIS MACHINE.

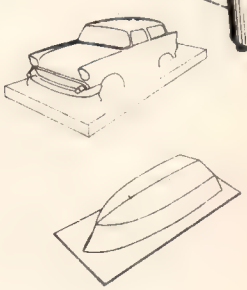
- **MOLDS ALL TYPES OF PLASTICS.**
- **WORKS WITH OVEN AND SHOP VACUUM CLEANER.**
- **ALL STEEL AND ALUMINUM CONSTRUCTION.**
- **PARTS FULLY GUARANTEED!**
- **PLATEN SIZE 6½" x 10½".**
- **PLASTIC SHEET SIZE 8" x 12"**



Cutting Wire

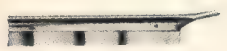
NI CHROME WIRE FOR FOAM CUTTING. THE SAME HIGH RESISTANCE WIRE WE USE FOR PRODUCTION. GIVES EXTREMELY SMOOTH CUT — LONG LASTING. #26 GAUGE - 25 FT. SPOOL



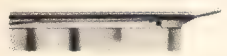


WIN20229 WING NI-CHROME WIRE #229 25 FT 4.95 4.50
WIN20812 WING MAGIC MOLDER MACHINE 99.95 56.95
WIN20904 WING .04 STYRENE 8X12 SHEETS-6 3.00 2.85

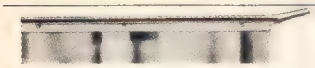
X-ACTO



No. 234 RAZOR SAW BLADE
¾" wide, cutting edge 4½" long; 42 teeth per inch.

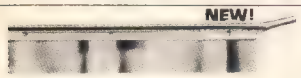


No. 235 RAZOR SAW BLADE
1" wide; cutting edge 4½" long. 42 teeth per inch. Carded



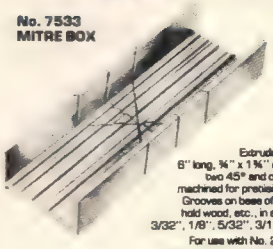
No. 236 RAZOR SAW BLADE
1¼" Razor Saw Blade for hobby and industrial use. Cutting Edge 5¼" long;

NEW!



No. 239 RAZOR SAW BLADE
1¼" wide; 70 teeth per inch for extra fine precision Cutting edge 5¼" long.

No. 7533 MITRE BOX



Extruded aluminum, 6" long, ¾" x 1⅝" capacity with two 45° and one 90° slots machined for precision accuracy. Grooves on base of mitre box to hold wood, etc., in sizes: 1/16", 3/32", 1/8", 5/32", 3/16" and 1/4"
For use with No. 236 and 239 Saw Blades only. Carded No. 7533

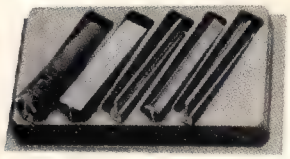


No. 7041 SANDER
Wood block sander [1" x 5"] including pad for round edges. Carded.



No. 7042 SANDER
Wood block sander [2"x5"] including pad for round edges. Carded.

No. 7351 CONTOURED SANDERS
This unique and useful kit offers five different sanding heads, 3 grip-tight handles, scientifically designed to get into those areas other sanders can't reach. Ideal for work with miniature furniture.
Including an assortment of pre-cut sheets of plastic-backed sandpaper, the Contour Sanding Kit works equally well on metal, fiberglass, plastic or wood surfaces. Fitted thermoformed plastic tray on attractive full color hang-up card.

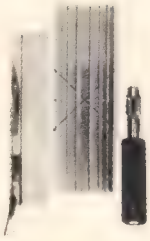




No. 7535 RAZOR SAW SET
For delicate sawing work and cutting in confined spaces.
Contains No. 239 Razor Saw Blade and No. 5 Handle. Can also be used with No. 7533 Mitre Box.



No. 7530 RAZOR SAW SET
No. 5 Handle and one each of No. 234 and No. 235 saw blades.
These are basic tools for the cutting of circuit boards, construction of models and mock-ups, shaping balsa, working fiberglass, cutting plastic, narrow-gauge tubing, and metals.



No. 7532 MITRE BOX SET
Make hairline cuts without chipping, splitting or leaving burred surfaces.
Contains aluminum mitre box, No. 236 Razor Saw Blade and No. 5 Handle.



No. 7531 RAZOR SAW AND KNIFE SET
An ideal unit for every hobbyist. Platform and cover serve as storage tray. Set contains No. 5 handle and one each of No. 236, No. 235, No. 234 saw blades; No. 15 keyhole saw blade; and 5 knife blades.



No. 7376
CORDLESS POWER DRILL
A battery operated hobby drill "geared" to deliver the power needed for drilling metals and plastics used in model building.
The X-acto Cordless Power Drill operates on two standard "C" flashlight batteries. For longer battery life, use alkaline heavy duty batteries.
Set complete [less batteries] in fitted plastic tray with three precision collets, drill bit, center punch, grinder.

Drills plastic, wood, light metal.

Grinds, Drills, Polishes, Carves, Deburs.

FEATURES:
- GREATER TORQUE — means more power.
- GREATER VERSATILITY — three precision collets hold drill bits or tool accessories up to .093.
- GREATER VISIBILITY OF WORK AREA — due to off center construction.



No. 7047 HAND DRILL — Hard steel chuck jaws, plastic handle [8" long]. Takes Drill Bits No. 80 [smallest] to 3/16". Carded



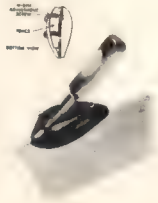
No. 7040 BLOCK PLANER — For delicate work and heavy planing — fits hand [3¾" long]. Single-bevel surgical steel blade, steel bottom plate, plastic body. Carded.
Refill Blades: No. 29 — pkg. of 2.



No. 7070 SCREW DRIVER SET
Aluminum handle and chuck; 5 different sizes of steel screw driver blades, notched shank for greater torque. .040, .055, .070, .080, .100.

No. 7380 PARTPICKER
for hard to handle pieces. Chrome-plated. Great for leadwork, attaching small fittings to miniature furniture, etc.





No. 7048 BALSA STRIPPER
Precision cutter [3¾" long], cuts sheets 1/32" to 3/16" thick, strips 1/16" to 1/2" wide — scale controls strip width. Carded without No. 6 knife



No. 7045 SPOKESHAVE
— For fine shaving, rounding, shaping. Solid one-piece metal handle [3-5/8" long], single-bevel surgical steel blade [7/8" wide]. Carded.
Refill Blades: No. 30 — pkg. of 2

No. 7500
Long-Nose — 4½"

No. 7504
Long-Nose, side cutting — 4½"

No. 7506
Diagonal Cutting — 4"





No. 7050 HAMMER SET — 7" all-metal handle complete with 6 different interchangeable heads — 8 steel balls, 1 flat steel, 1 flat brass, 1 flat plastic, 1 tinner's steel.



No. 7448 "C" CLAMP SET
Four different "C" Clamps of light weight, high-strength magnesium with steel screws, aluminum lock plates.
Carded.

L — 1-5/8" wide, 1" deep
M — 1-1/4" wide, 1-1/8" deep
N — 1" wide, 1" deep
O — 1-1/2" wide, 1-3/4" deep

NEW!



No. 7370 MINI VACU-VISE
No screws. Just flip lever! Holds tight instantly on non-porous surfaces — Formica, glass, metal, etc. Ideal for hobbyist, do-it-yourselfer, craftsman, sportsman. Each unit individually shrink-wrapped on a colorful card.



No. 7059 BENCH VISE
For light holding operations in shop, home or garage. Made of cast iron with baked on blue enamel. Jaws are milled and ground and open to 1¾".



No. 7044 COPING SAW
Steel frame, wood handle. Adjustable blade grips hold blade taut. Length: overall 11". Complete with 1 standard and 1 spiral safety coping saw easy-to-change blades.

Refill blades:
NO. 734 Coping Saw Blade - pkg. of 5.
NO. 735 Spiral Saw Blade - pkg. of 3.



No. 7378 SOLDERING IRON AND HOT KNIFE

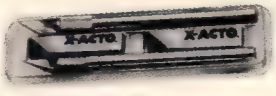
25 watt soldering iron — Top quality. Does the work of irons with higher wattage. Hold and use as a pencil. Replaceable tip. Narrow diameter tip gets into tight places. Develops up to 720°F. Handle remains cool. Pre-tinned, nickel plated tip means longer tip life. Includes convenient wire stand.

Hot knife — Model Building: cuts through plastics rapidly and accurately.

General use: rework connectors, clear product surfaces that have epoxy or flash, remove coated circuit board components. The No. 7378 X-ACTO Soldering iron and Hot Knife comes mounted on a colorful card ... complete with instructions. UL approved.



No. 51-ST No. 1 knife with 5 extra assorted blades [No. 1 Assrtmt.] No. 5011



No. 62 DOUBLE KNIFE SET
Nos. 1 & 2 knives with 10 assrtd. blades, on plastic base with removable Vis-Dome cover. No. 5062

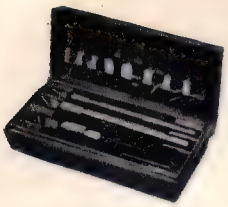


No. 7361 NEEDLE FILE SET
A full assortment of six different file styles suited to a wide variety of assignments, plus a universal, quick-change, comfort-grip handle.

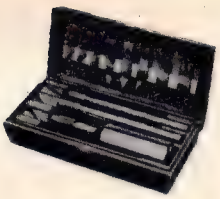


No. 7163 FILE SET HEAVY DUTY
Handle plus assortment of files for heavy duty work, in handy storage tray on attractive full color hang-up card.

X-ACTO



No. 5082 KNIFE CHEST
Nos. 1, 2 and 5 Knives plus 10 assts'd. Extra blades. Handy, fitted chest. Carded — No. 5082



No. 5083 KNIFE CHEST
Nos. 1, 2 and 6 knives plus 14 assts'd. extra blades. In a beautiful wooden chest. Order No. 5083.



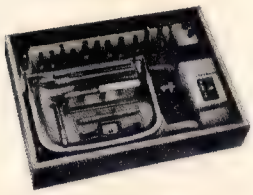
No. 5088 COMPLETE HOBBY DEN TOOL CABINET
Modern, functional package shows off the X-Acto full assortment of hobby tools, knives and blades. Comes in a sturdy fitted cabinet with sliding see-thru cover. (Size 13¼x21¼x3")

CONTENTS: 8 Extra Blades, 4 Assorted Gouges, 4 Assorted Routers, 2 Knives (with blades), 1 Planer, 1 Hobbycraft Saw, 2 Screwdrivers, 2 "C" Clamps, 1 Tweezer, 1 Pair Pliers, 2 Tweezer Clamps, 1 Hand Drill, 1 File, 1 Hammer (with extra heads), 1 Bench Vise, 1 Razor Saw Blade, 1 Chuck, 1 Sander.
Order No. 5088 (old no. 88N).

Plus FREE copy of "THE X-ACTO WORKSHOP" a Guide Book to X-acto Knives and Tools with Selected Projects.



No. 5284 KNIFE AND TOOL SET
Contains Nos. 1, 2, 5 knives and an entire asst. of blades, gouges, routers. Has X-ACTO planer, sander, spokeshave, balsa stripper. Complete with see-thru cover and fitted plastic tray insert that holds and shows every tool. Available Carded, No. 5284.

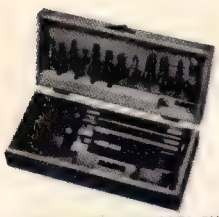


No. 5085 DELUXE KNIFE AND TOOL SET
Nos. 1, 2 and 5 knives and an entire asst. of blades, gouges, routers, punches; plus planer, sander, hobbycraft saw, razor saw blade, spokeshave, pin vise, screwdriver, asst. drill bits. In wooden box, complete with see-thru cover and fitted plastic tray insert that holds and shows every tool. Order No. 5085.



No. 5089 DELUXE HOBBY TOOL AND KNIFE CHEST
Extra sturdy all wood carrying case contains: 4 Routers, 4 Gouges, 8 Extra Refill Blades, 1 Razor Saw Blade, No. 7044 Coping Saw, No. 7040 Block Planer, Tweezer, No. 1 Knife, No. 11 Knife, 1 Pair pliers, No. 7050 Hammer Set, No. 7047 Hand Drill, No. 7351 Contoured Sander Set, No. 7360 File handle, with 2 needle files, 1 Bench Vise, 2 "C" Clamps, No. 7349 Heat Sink, 1 Plastic Handle Screwdriver, 1 Jeweler's Screwdriver, with 1 bit, 1 Pin Vise, 2 Drill Bits, 1 Chuck Adapter.
Order No. 5089 (old no. 89)
(Size: 14x10x3½ inches—weight: 8 pounds)

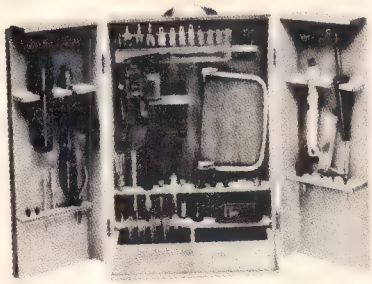
Plus FREE copy of "THE X-ACTO WORKSHOF a Guide Book to X-acto Knives and Tools with Selected Projects.



No. 5086 KNIFE AND TOOL CHEST
Contains Nos. 1, 2, 5 knives and complete asst. of blades, gouges, routers. Has X-ACTO planer, sander, spokeshave, balsa stripper. In handsome fitted wood chest. Order No. 5086.



No. 5087 KNIFE AND TOOL CHEST
Contains No. 1, 2 and 5 knives, complete asst. of blades, gouges and routers; plus X-ACTO planer, sander, hobbycraft saw, spokeshave, balsa stripper, pin vise, screwdriver, assts'd. drill bits. In large fitted wood chest. Order No. 5087.



No. 5099 SUPER-SET TOOL CABINET
The ultimate in tool chests — containing a complete assortment of hobby tools, knives and blades fitted into a handsome wood cabinet, (with drawer for storage of small parts). A compact, orderly way of housing all your hobby tools. Cabinet measures 13" wide x 19" high x 5½" deep. Weight: 13½ pounds.

CONTENTS: 1 No. 1 Knife, 8 Extra refill blades, 1 No. 5 Knife, 4 Routers, 1 Punch, 1 Razor Saw Blade, 1 No. 7351 Contoured Sander Set, 1 Jeweler's Screwdriver with 1 bit, 1 No. 7375 Cordless Power Drill — center punch, grinder, and 1 drill bit, 1 No. 7047 Hand Drill, 1 No. 7378 Soldering Iron/Hot Knife, 1 No. 7044 Saw, 1 Tweezer, 1 Pair Pliers, 1 No. 7059 Bench Vise, 1 No. 7050 Hammer Set, 1 No. 7349 Tweezer/Heat Sink, 1 File Handle, with 1 needle file, 1 No. 7040 Planer, 1 Large Screwdriver (with plastic handle).

Plus FREE copy of "THE X-ACTO WORKSHOP" a Guide Book to X-Acto Knives and Tools with Selected Projects.



No. 1 KNIFE
For light to medium work. Aluminum handle 5" long, complete with No. 11 blade.
In Tube No. 3001



No. 2 KNIFE
For medium to heavy work. Aluminum handle 5" long, complete with No. 22 blade.
In Tube No. 3002



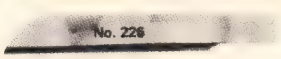
No. 6 KNIFE
For heavy work. Solid aluminum hexagonal handle (4¾" long) complete with No. 24 blade. In Tube No. 3006



No. 8R UTILITY KNIFE
Reversible blade. Carded with extra blade. No. 3208.
Refill blades: 5 in Tuck No. 8



No. 9RX KNIFE Retractable Push-Button Knife. Positive lock when open. Safety-grip handle — especially adapted for fine work, retouching, stencil, etching. For any delicate, close work where extreme accuracy is utmost.
No. 3209

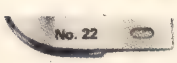


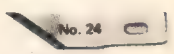












XAC36051	X-ACTO 5011 KNIFE SET	1.69	1.50
XAC36053	X-ACTO 7530 RAZOR SAW SET	3.79	3.40
XAC36062	X-ACTO 5062 DOUBLE KNIFE SET	3.99	3.60
XAC36070	X-ACTO 7070 SCREWDRIVER SET	3.29	2.95
XAC36082	X-ACTO 5082 KNIFE CHEST	6.99	6.30
XAC36083	X-ACTO 5083 DELUXE KNIFE CHEST	7.99	7.20
XAC36084	X-ACTO 5284 KNIFE & TOOL SET	17.95	15.95
XAC36085	X-ACTO 5085 DLX KN. & TOOL SET	26.95	21.55
XAC36086	X-ACTO 5086 KNIFE & TOOL CHEST	19.95	17.95
XAC36087	X-ACTO 5087 KNIFE & TOOL CHEST	29.95	26.95
XAC36088	X-ACTO 5088 COMPLETE K&T CABNT	54.50	40.85
XAC36089	X-ACTO 5089 DLX K&T CABINET	64.50	48.35
XAC36099	X-ACTO 5099 SUPER TOOL CABINET	89.50	66.95
XAC36351	X-ACTO 7351 CONTOURED SANDERS	5.59	5.00
XAC36531	X-ACTO 7531 RAZOR SAW & KNIFE	6.99	6.30
XAC36532	X-ACTO 7532 MITRE BOX SET	5.99	5.40
XAC36533	X-ACTO 7533 MITRE BOX-ONLY	2.99	2.70
XAC37001	X-ACTO 3001 KNIFE #1	.99	.95
XAC37002	X-ACTO 3002 KNIFE #2	1.50	1.35
XAC37006	X-ACTO 3006 KNIFE #6	2.59	2.35
XAC37008	X-ACTO 8 BLADE(5)	.79	.75
XAC37009	X-ACTO 3209 RETRAC. KNIFE #9RX	3.99	3.60
XAC37010	X-ACTO 10 BLADE(5)	1.10	1.00
XAC37011	X-ACTO 11 BLADE(5)	.69	.65
XAC37015	X-ACTO 215 BLADE(3)	1.19	1.10
XAC37022	X-ACTO 22 BLADE(5)	1.19	1.10
XAC37024	X-ACTO 24 BLADE(5)	.69	.65
XAC37026	X-ACTO 226 BLADE(3)	.89	.85
XAC37034	X-ACTO 234 SAW BLADE 3/4 DEEP	1.29	1.15
XAC37035	X-ACTO 235 SAW BLADE 1 IN DEEP	1.29	1.15
XAC37040	X-ACTO 7040 BLOCK PLANER	2.29	2.05
XAC37041	X-ACTO 7041 1 IN. SANDER	1.19	1.10
XAC37042	X-ACTO 7042 2 IN. SANDER	1.29	1.15
XAC37044	X-ACTO 7044 COPING SAW	3.99	3.60
XAC37045	X-ACTO 7045 SPOKESHAVE	1.59	1.45
XAC37046	X-ACTO 7046 "C" CLAMP SET	5.99	5.40
XAC37047	X-ACTO 7047 HAND DRILL	5.99	5.40
XAC37048	X-ACTO 7048 BALSA STRIPPER	2.49	2.25
XAC37050	X-ACTO 7050 HAMMER SET	5.99	5.40
XAC37108	X-ACTO 3208 RETR'BLE KNIFE #8R	.69	.65
XAC37135	X-ACTO 236 SAW BLADE 1-1/4 IN.	1.69	1.50
XAC37139	X-ACTO 239 SAW BLADE, X-FINE	1.79	1.60
XAC37144	X-ACTO 735 SPIRAL SAW BLADE(3)	.99	.95
XAC37145	X-ACTO 734 COPING SAW BLADE(5)	1.59	1.45
XAC37361	X-ACTO 7361 NEEDLE FILE SET	7.59	6.85
XAC37370	X-ACTO 7370 MINI VACU-VISE	4.79	4.30
XAC37376	X-ACTO 7376 CORDLESS DRILL SET	8.99	8.10
XAC37378	X-ACTO 7378 SOLDERING IRON W/K	8.49	7.65
XAC37380	X-ACTO 7380 PART PICKER	2.29	2.05
XAC37504	X-ACTO 7504 PLIERS-SIDE CUT	4.99	4.50
XAC37505	X-ACTO 7505 PLIERS-DIAG CUT	4.99	4.50
XAC37509	X-ACTO 7509 PLIERS-LONG NOSE	4.99	4.50
XAC37655	X-ACTO 7535 RAZOR SAW SET	3.29	2.95
XAC37659	X-ACTO 7059 BENCH VISE	3.79	3.40
XAC37663	X-ACTO 7163 IVY DUTY FILE SET	8.59	7.75

Covering Materials and Aids

Because we've added whole sections about how to use the covering materials we sell, I won't tell you the same things here. Instead, I'll just talk about them in general.

Monokote is probably the oldest of the covering products on the market, short of silk and tissue. It came out as a covering with a sticky back that you laid in place and then sealed to the surface with the iron. Its shrinking characteristics were very like those of the present-day stuff. The modern Monokote is a much improved product . . . it has a dry adhesive that is activated only by the application of heat. This allows you to position it exactly where you want it before you tack it into place. It's true name is "Top Flite Super Monokote," but if you just ask for "Monokote," you'll get the same material. The original stuff is no longer available, as the modern covering is quite superior to it.

Solarfilm is similar to Monokote, but it is lighter and uses a lower heat for application. It isn't quite as strong as Monokote, however. That's of little consequence for most planes, so you can choose it without worrying about your model. The color choices are a little different from those of Monokote, so you can pick out what you'd like.

Econokote is similar to Solarfilm, but it's made by Top Flite. Its handling characteristics are similar to those of Solarfilm, but again, the colors offered are slightly different.

A fourth heat-applied material is totally different from the "kotes," or films. This material is Coverite. It is offered in three basic varieties: Silkspun, Super, and Permaglos. The silkspun variety is made of a synthetic non-woven fabric. It is very strong and contains a built-in finish. Super Coverite is a woven synthetic fabric and combines high strength and scale appearance. It is just great for those planes that require a scale-looking fabric job. This material is just about the strongest material you can get to cover your plane. Permaglos Coverite is Silkspun Coverite with a permanent gloss finish applied to it during manufacture. It provides you with a high gloss finish with a minimum of labor. This comes in a variety of colors, and if you really want to knock your buddies' eyes out, use the Dayglo colors on your next plane. I guarantee you'll have a hard time losing this one in the sky (well, only if you don't look away from the plane).

If you are a Traditionalist, we do carry silk. It is 100% pure silk, imported from Japan by Royal Products. It's available in colors so you can apply just a few coats of clear to get a nice finish. For paints, look at the paint section . . . we carry a complete selection of the traditional dope, as well as a lot of more modern paints.

For application of the heat-shrink and heat-activated coverings, we carry a good selection of irons and heat guns. Check out this section, too.

ROYAL

Royal SILK is an extremely fine grade of silk. It comes in both a light and heavy duty grade, giving you a choice depending upon weight/strength constraints of your particular model. It also comes in several colors as some modellers prefer to use a clear finish over the silks beautiful rich color. 2 square yards.

ROY44301	ROYAL LIGHT SILK WHITE 2 YD.	8.69	6.50
ROY44302	ROYAL LIGHT SILK RED 2 YD.	8.69	6.50
ROY44305	ROYAL LIGHT SILK ORANGE 2 YD.	8.69	6.50
ROY44313	ROYAL LIGHT SILK YELLOW 2 YD.	8.69	6.50
ROY44401	ROYAL HEAVY SILK WHITE 2 YD.	10.89	8.15
ROY44402	ROYAL HEAVY SILK RED 2 YD.	10.89	8.15

SOUTHERN R/C

Southern R/C SKYLOFT is a revolutionary new covering material designed to replace silk and silk-span. It is a continuous filament spun bonded nylon that has extreme strength, ultra light weight, is easy to use, and has tremendous "fillability" (completely filled with 3 coats of dope). Each package contains 3 square yards and complete instructions.

SRC43001	SOUTHERN RC SKYLOFT 3 SQ. YD.	2.80	2.50

SEALECTOR

HEAT SEALING IRON

USED FOR THE APPLICATION OF MONOKOTE, SOLARFILM, KWIK-COTE AND OTHER HEAT SHRINK COVERINGS.



CUSTOM MODEL #SEA45202

The Sealector Custom Iron features a pointed tip, edge radius, and durable teflon coating. It has a heavy duty 165 Watt heating element that gives accurate heat control due to an adjustable thermostat knob. Heat range is 300 to 500 degrees F. Comes with handy stand.

SEA45202	SEALECTOR CUSTOM MODEL IRON	22.40	17.75

TOP FLITE





SEALING IRON #TOP45200 (above) — features teflon coating, pointed tip, up swept front, thermostatically controlled.

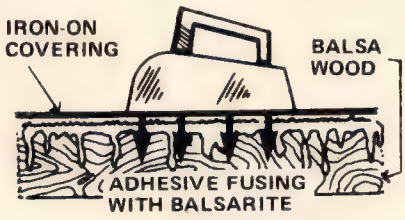
HEAT GUN #TOP45301 (above right)—features 3 position switch, nozzle attachment, 2 speed heat control, and long motor life.

TOP45200	TOP FLITE SEALING IRON	18.95	14.75
TOP45301	TOP FLITE HEAT GUN	27.95	22.95

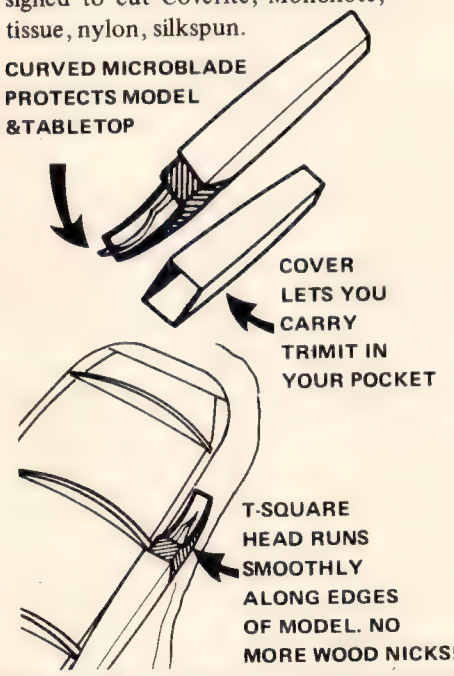
COVERITE

After spending all those hours building the framework and controls, it's high time we had a system for covering that works reliably, and doesn't scuff or shatter every time you have a less-than-perfect landing.

Step No. 1. Here's how Balsarite eliminates bubbles and sags. Iron-on coverings tend to stick only to the surface of balsa, often leaving trapped air, then sagging and coming unglued. **Balsarite** sinks deep into the wood, then melts and intermixes with the adhesive of the covering as it is ironed on. No trapped air, only deep permanent adhesion. Eliminates sagging, fuelcreep, warping due to moisture, and makes hard-to-reach fillets easy to cover. If you use Monokote, Solarfilm and Coverite, you must use **Balsarite.** It takes the gamble out of covering with iron-ons.



Step No. 2. New tool called TRIMIT ends wood gouges. The Trimit is designed to cut Coverite, Monokote, tissue, nylon, silkspun.



Step No. 3. There's a Coverite for every type of model. Silkspun Coverite looks like tissue, but is **10x** stronger. It can be used as is (filler coat is built-in) or painted, requiring 1/3rd the paint. It's the most economical of all iron-ons. Super Coverite looks like silk, weighs the same when both are painted, but is 100x stronger. Like Silkspun it can be used as is, or painted. Being a woven fabric, it's very authentic. Permagloss Coverite looks like painted silk. It actually has 4 coats of special Permagloss paint on it, which is fuelproof, rotproof, fadeproof. It's 150x stronger than any other covering. Available in trim sheets, too. Camouflage Coverite looks like WWI German lozenge pattern. Made out of Super Coverite with Camouflage pattern silkscreened in 4 colors, just as it was done in the war. 1½" or 2" scale.

Dayglow is snazzy. Now Permagloss comes in Dayglow colors: fiery orange and screaming yellow. You can see them clearly even against gray skies. And they look fantastic! Cover an entire plane or just trim.

Study these facts about iron-ons. Then make your own conclusions.

Middle age sag. Sometimes it doesn't even take that long for plastic film coverings to sag. Sorry, but it's the nature of the beast. Only one iron-on remains drum tight, month after month, in all kinds of weather. Only Coverite's 100% polyester fibres have the ability to shrink and stay shrunk permanently. Without warpage. Coverite stops shrinking when it meets ½ gram of resistance.

Who needs turbulation! Everyone needs turbulation, even a pylon racer. Aerodynamically the fabric texture of Coverite has superior handling characteristics. Unlike plastic films which are overly smooth, Coverite's texture allows for greater turbulation, hence better maneuverability. Gliders, for example, ride the thermals better with Coverite. That's about as pure a test as any. But don't take our word for it. Ask the guys who continually win NATS & INTERNATS why they use Coverite. Guys like Roth, Platt, Titus, Moucha, Weiss, Ellis, Peterson, Vandever, etc., etc., etc.

Ever have a crash? Why not buy an insurance policy? Crashes are inevitable (bite our tongues). But if the model was Coverited, chances are better than 50-50 the plane would survive; and with minor repairs, live to fly again. Not so with plastic films. They usually shatter. In many pieces. What's more, even normal landings cause plastic film to scratch, scuff, tear and puncture. That's a bitter pill to swallow after spending all those hours building and finishing a fine model. It's also unnecessary.

COV41201	COVERITE SUPER 38X47 WHITE	7.75	6.75
COV41202	COVERITE SUPER 38X47 RED	7.75	6.75
COV41203	COVERITE SUPER 38X47 BLUE	7.75	6.75
COV41204	COVERITE SUPER 38X47 ORANGE	7.75	6.75
COV41205	COVERITE SUPER 38X47 YELLOW	7.75	6.75
COV41206	COVERITE SUPER 38X47 ANTIQUE	7.75	6.75
COV41251	COVERITE SUPER 47X15 FT WHITE	36.50	27.40
COV41252	COVERITE SUPER 47X15 FT RED	36.50	27.40
COV41253	COVERITE SUPER 47X15 FT BLUE	36.50	27.40
COV41254	COVERITE SUPER 47X15 FT ORANGE	36.50	27.40
COV41255	COVERITE SUPER 47X15 FT YELLOW	36.50	27.40
COV41256	COVERITE SUPER 47X15 FT ANTIQU	36.50	27.40
COV41301	COVERITE SILKSPUN 38X54 WHITE	7.75	6.75
COV41302	COVERITE SILKSPUN 38X54 RED	7.75	6.75
COV41303	COVERITE SILKSPUN 38X54 BLUE	7.75	6.75
COV41304	COVERITE SILKSPUN 38X54 ORANGE	7.75	6.75
COV41305	COVERITE SILKSPUN 38X54 YELLOW	7.75	6.75
COV41351	COVERITE SILKSPUN 38X25FT WHIT	43.00	32.25
COV41401	COVERITE CAMOUFLAGE 1-1/2 SCL	9.95	7.95
COV41402	COVERITE CAMOUFLAGE 2 IN. SCL	9.95	7.95
COV41501	COVERITE PERMAGLOS 38X43 WHITE	9.75	8.25
COV41502	COVERITE PERMAGLOS 38X43 RED	9.75	8.25
COV41503	COVERITE PERMAGLOS 38X43 BLUE	9.75	8.25
COV41504	COVERITE PERMAGLOS 38X43 ORANG	9.75	8.25
COV41505	COVERITE PERMAGLOS 38X43 YELLO	9.75	8.25
COV41506	COVERITE PERMAGLOS 38X43 O.D.	9.75	8.25
COV41507	COVERITE PERMAGLOS 38X43 ALUM.	10.70	8.95
COV41508	COVERITE PERMAGLOS 38X43 BLACK	9.75	8.25
COV41551	COVERITE PERM. 46X15 FT WHITE	46.18	34.65
COV41552	COVERITE PERM. 46X15 FT RED	46.18	34.65
COV41553	COVERITE PERM. 46X15 FT BLUE	46.18	34.65
COV41554	COVERITE PERM. 46X15 FT ORANGE	46.18	34.65
COV41555	COVERITE PERM. 46X15 FT YELLOW	46.18	34.65
COV41556	COVERITE PERM. 46X15 FT O.DRAB	46.18	34.65
COV41557	COVERITE PERM. 46X15 FT ALUM.	50.68	37.95
COV41604	COVERITE DAYGLOW ORANGE 38X43	10.70	8.95
COV41605	COVERITE DAYGLOW YELLOW 38X43	10.70	8.95
COV45000	COVERITE TRIM-IT KNIFE	1.19	.95
COV60000	COVERITE BALSARITE 8 OZ	2.95	2.85

TOP FLITE MONOKOTE & ECONOKOTE

SUPER MONOKOTE® & NEW! ECONOKOTE™

TO GIVE YOU A PERFECT COVERING FOR EACH OF YOUR MODELING NEEDS.

Both have a fuel proof dry adhesive that will not stick to itself when handling. Both are lightweight and strong, puncture and tear resistant, odorless and moisture proof, stain and fade proof, too. And both come in great ultra high gloss colors.

BUT, WHAT ARE THE DIFFERENCES?

SUPER MONOKOTE®

There s no better film than SUPER MONOKOTE for covering your open wing and frame structures, where extra strength is needed.

SUPER MONOKOTE offers a much wider range and selection of colors, including transparent and flat finishes.

NEW! ECONOKOTE™

Because of its lower heat application, ECONOKOTE is ideal for use on foam surfaces.

ECONOKOTE is great for use on solid areas and strong open frame structures where extra strength isn't necessary.

ECONOKOTE's new formulation makes it more flexible and pliable for use on compound curves.

ECONOKOTE is perfect as a trim material on *any* surface, *without* solvents.



TOP FLITE MONOKOTE & ECONOKOTE

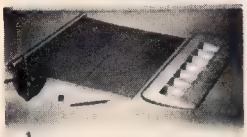
Revolutionary **New!**

EconoKote™

The covering with the built-in finish

EconoKote will give you a professional looking finish in a fraction of the normal time, eliminating the usual tedious work of sealing, doping, sanding and polishing.

HOW TO COVER WITH EconoKote



1. To prepare model for covering with EconoKote, fill cracks and holes and then sand all surfaces with 400 sandpaper, wipe clean. The smoother the undersurface, the smoother the finish. Do not dope or seal the wood. The only tools required are: A. Small electric travel iron or Top Flite Sealing Iron; B. Razor blade; C. Felt-tipped pen.

NOTE: *To set iron at proper temperature, turn the thermostat up to the point where it will melt a hole in the material, then turn it back a little at a time until it no longer melts the material. At this point you have the correct working temperature (usually just below "Perma-Press" setting, or at No. 2 position on Top Flite Sealing Iron).*



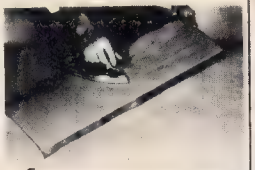
2. Unroll the EconoKote on table and lay part to be covered on it. Cut piece of EconoKote approximately 2" larger in width and 3" or so longer than the part to be covered. When covering wings and stabilizers, cover bottom first.



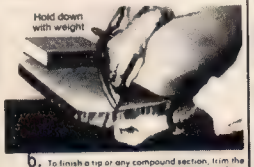
3. Remove EconoKote from backing film and lay on part to be covered adhesive side down (if you forget which side has adhesive, touch iron point to edge of material. Iron will stick only to the adhesive side). Allow 1" overlap all around except at tip where overlap is 3".



4. Tack material to wing at four corners. Next bond the EconoKote to the trailing edge by starting at the center and working out to one end and then the other, applying only slight pressure. The heat of the iron will cause some of the colors to change. As the area cools it will return to its original color. Repeat this process on the leading edge, along the tip rib and at the root of the wing, making sure to bond all outside edges completely around the structure. Try to get the covering as smooth as possible. Any remaining wrinkles will be shrunk out later.



5. To shrink the covering tight, set the iron on the surface of the material and glide it back and forth over entire area. **DO NOT PRESS DOWN!** Just glide it over the surface lightly. The EconoKote will then cool and shrink drum tight. On an open frame wing, be sure to bond to **each rib.**



6. To finish a tip or any compound section, trim the material to about the shape to be covered leaving about 3" oversize for gripping. Starting at the high point of the compound curve, grab the excess material, apply heat just **ahead** of the curve and as the material becomes pliable from the heat, stretch the EconoKote over the section. Repeat this process until all wrinkles are worked out and the tip or curved section is smooth. Work slowly keeping tension on the material at all times. Let the heat of the iron do the work, very little pressure is needed.



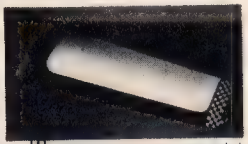
7. Trim off all excess material by cutting close to structure. Bond fresh cut edges with iron. Repeat entire covering process for top of wing, allowing second surface to overlap about 1/8" after trimming.



8. Before covering stab and fin, it is best to put a 3/8" fillet strip of EconoKote in the corner, half overlapping the fin and half overlapping the stab. Tack at one end, pull tight as you iron in the fillet. Finish covering the fin and stab by repeating the same process as done for wing.

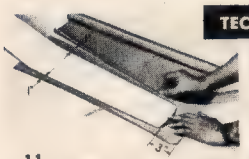


9. When covering fuselages or all-sheeted wings, stabs, etc., bond the covering along the **center** of the area first. Then iron out toward the **edges**, allowing the air to escape from under the material as you go. Keep tension on material at all times.



10. EconoKote can be used for trim. No fuel-proofing of edges is necessary. Over large solid wood areas, cut away the base color, then cut trim-color pattern and iron to the bare wood. Another trim method for solid wood areas or open frames is to iron the trim pattern on top of the base color.

TECHNIQUE FOR COVERING FOAM



11. To prepare foam surfaces for covering with EconoKote, first sand off all flash, mold protrusions, etc., that may show through the material. The smoother the undersurface, the better the finished job. Cut material to shape of wing, leaving at least 1" extra width on each of the leading and trailing edges and about 3" longer at the tip. Prepare for covering as per steps No. 1 and No. 2.



12. Set iron at just below the melting point of the EconoKote as per NOTE in step No. 1. Apply the material by ironing along the **center** of the wing as shown. Don't hold iron in one spot too long — keep it moving, using only slight pressure.



13. Now pull the excess material as you iron the EconoKote toward and over the leading and trailing edges. Finish off tip, see step No. 6.



14. After trimming off the excess material as per step No. 7, go over the trimmed edge with the iron and make sure that all edges are sealed down tight. This is to prevent fuel from getting under the surface of the EconoKote. Trim designs can be applied directly over the EconoKote by cutting out a pattern and ironing it to the surface using masking tape to align the design.

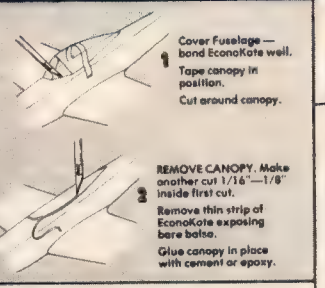


15. Pin striping can be applied in the same manner as trim design. Use slightly lower temperature. No fuel proofing of the edges is necessary.



16. The fuselage covering is prepared in the same manner as per step No. 11. Cut an oversized pattern of the side to be covered as shown. Do one side at a time.

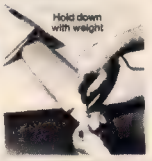
HOW TO ATTACH CANOPIES OVER WOOD STRUCTURES



1. Cover Fuselage — bond EconoKote well.
   Tape canopy in position.
   Cut around canopy.

2. REMOVE CANOPY. Make another cut 1/16"—1/8" inside first cut.
   Remove thin strip of EconoKote exposing bare balsa.
   Glue canopy in place with cement or epoxy.

WE RECOMMEND . . . that you use the Top Flite Sealing Iron and Top Flite Heat Gun for best results . . . for that really professional look!



←**17.** Position the EconoKote over the side and iron it down as done with the wing, starting at the center, pulling the excess material and ironing as you apply tension to the material. To do a good job around compound sections such as the nose, apply heat just **ahead** of the compound area and stretch the heated material over that area. Continue this process around the compound area until all wrinkles are removed. Trim off the excess material and proceed with another side.

CAUTION: *Do not try to cover fuselage in one piece, it is too difficult!*

HINTS ABOUT AND CARE OF EconoKote

1. When covering a model with EconoKote, it is best to first assemble all of the major elements of the model without permanently attaching same; then disassemble and cover each part or element individually. When this is done, put the model back together and glue all parts permanently in place. Make sure there is no EconoKote covering areas where wood has to be glued to wood.
2. EconoKote covered models can be cleaned with detergent (dishwashing liquid, etc.).
3. Dents in EconoKote as a result of any accident can be eliminated by simply applying heat over the affected area.
4. A puncture can be repaired in the field simply by covering the area with a patch of Trim MonoKote. Later at home, remove field patch and replace with clean patch of ironed-on EconoKote.
5. For best results and to avoid any possible scratching of the EconoKote surface, keep the iron clean and smooth at all times. Use fine rubbing compound on cold iron to remove scratches before use.
6. Should air become trapped under the surface while shrinking EconoKote, just puncture the material with a small pin to allow the air to escape.
7. When covering undercambered wings, seal outline first, seal to concave ribs next, following iron-point with your finger or a dampened ball of Kleenex. Finally, shrink covering tight.
8. Fillets, such as between fuselage and fin, should be covered first using a strip of material and keeping tension at all times, see Fig. #8.

FACTS ABOUT EconoKote

LIGHT WEIGHT — Intended primarily for covering **foam** surfaces and over strong structures **Not recommended** for glider wings, free flight or light weight structures where high flexing or twisting occurs! EconoKote weighs 1/5th ounce per square foot, thus saving much weight over regular (paint, dope, etc.) covering and finishing methods.

STRONG — Tensile strength — 25,000 P.S.I. / **LOW COST** — Works with LOW HEAT / **FUEL-PROOF** (both film and adhesive) / **LONG LASTING** / **MOISTURE-PROOF** / **STAIN-PROOF.**

PUNCTURE RESISTANT — Many times the tear-strength of silk and dope coverings / **APPLIES EASILY OVER COMPOUND CURVES** / **ODORLESS** / NO IRRITATING SMELLS. NO DANGEROUS FUMES.

LOWER HEAT COVERING — More flexible, easier to apply than any other low cost material / **NO SOLVENT NEEDED** to trim with another second color on surface / **WILL NOT STICK TO ITSELF** upon contact of adhesive to adhesive side. Can be used for covering fuselages and solid wood areas with ease.

FACTS ABOUT MonoKote

STRONG—Tensile strength 25,000 P.S.I.

LIGHTWEIGHT—Super MonoKote weighs one-fifth ounce per square foot. The average large RC model will use about 4 ounces of Super-MonoKote, saving at least half-a-pound over regular covering and finishing methods.

LONG LASTING — FUEL PROOF — MOISTURE-PROOF — STAIN PROOF

PUNCTURE RESISTANT—Many times the tear strength of silk and dope coverings.

ODORLESS—No irritating smells, no dangerous fumes.

WILL NOT INDUCE WARPING even on lightweight structures.

TOP FLITE MODELS, INC., 1901 N. Narragansett Ave., Chicago, IL 60639

©1977 - TOP FLITE MODELS, INC.

The instructions above are a reduced reproduction of the actual instruction sheet provided with each roll of Econokote. Steps #1 through #10 are exactly the same for Monokote. Steps #11 through #17 are not applicable to Monokote as Monokote is not intended for use on foam surfaces. The hints and care of Econokote section is true for Monokote as well. The six Econokote colors match the same Monokote colors exactly so that you can "mix-and-match." Both Econokote and Monokote come on rolls that are 26" wide and 6 feet long (Monokote also comes in 25 foot long rolls). Econokote colors are opaque which means that you can't see through the plastic film. Monokote has a clear, 11 opaque colors, 4 transparent colors, and 3 metallic opaque colors. To decorate and trim Monokote or Econokote use Monokote trim sheets, markings, numerals, and insignias (see P-260 for list). Apply Monokote and Econokote with a sealing iron (TopFlite or Sealector) and/or a Top Flite heat gun (see P-204). All these items are pictured to the left also along with Monokote rolls.

ECO48601	ECONOKOTE #601 RED	6.95	4.85
ECO48602	ECONOKOTE #602 ORANGE	6.95	4.85
ECO48603	ECONOKOTE #603 YELLOW	6.95	4.85
ECO48604	ECONOKOTE #604 WHITE	6.95	4.85
ECO48606	ECONOKOTE #606 SKY BLUE	6.95	4.85
ECO48607	ECONOKOTE #607 INSIGNIA BLUE	6.95	4.85
MON40200	MONOKOTE #200 6 FT CLEAR	9.00	5.60
MON40201	MONOKOTE #201 6 FT RED	9.00	5.60
MON40202	MONOKOTE #202 6 FT ORANGE	9.00	5.60
MON40203	MONOKOTE #203 6 FT YELLOW	9.00	5.60
MON40204	MONOKOTE #204 6 FT WHITE	9.00	5.60
MON40205	MONOKOTE #205 6 FT ALUMINUM	9.00	5.60
MON40206	MONOKOTE #206 6 FT SKY BLUE	9.00	5.60
MON40207	MONOKOTE #207 6 FT INSIG BLUE	9.00	5.60
MON40208	MONOKOTE #208 6 FT BLACK	9.00	5.60
MON40209	MONOKOTE #209 6 FT CHROME	9.00	5.60
MON40210	MONOKOTE #210 6 FT OLIVE DRAB	9.00	5.60
MON40211	MONOKOTE #211 6 FT DOVE GRAY	9.00	5.60
MON40301	MONOKOTE #301 6 FT TRANS RED	9.00	5.60
MON40302	MONOKOTE #302 6 FT TRANS ORANG	9.00	5.60
MON40303	MONOKOTE #303 6 FT TRANS YELLO	9.00	5.60
MON40304	MONOKOTE #304 6 FT TRANS BLUE	9.00	5.60
MON40401	MONOKOTE #401 6 FT MET GREEN	10.50	7.25
MON40402	MONOKOTE #402 6 FT MET BLUE	10.50	7.25
MON40403	MONOKOTE #403 6 FT MET PLUMB	10.50	7.25
MON41200	25 FT MONOKOTE CLEAR	37.50	23.95
MON41201	25 FT MONOKOTE RED	37.50	23.95
MON41202	25 FT MONOKOTE ORANGE	37.50	23.95
MON41203	25 FT MONOKOTE YELLOW	37.50	23.95
MON41204	25 FT MONOKOTE WHITE	37.50	23.95
MON41205	25 FT MONOKOTE ALUMINUM	37.50	23.95
MON41206	25 FT MONOKOTE SKY BLUE	37.50	23.95
MON41207	25 FT MONOKOTE INSIGNIA BLUE	37.50	23.95
MON41208	25 FT MONOKOTE BLACK	37.50	23.95
MON41209	25 FT MONOKOTE CHROME	37.50	23.95
MON41210	25 FT MONOKOTE OLIVE DRAB	37.50	23.95
MON41211	25 FT MONOKOTE DOVE GRAY	37.50	23.95
MON41301	25 FT MONOKOTE TRANS RED	37.50	23.95
MON41302	25 FT MONOKOTE TRANS ORANGE	37.50	23.95
MON41303	25 FT MONOKOTE TRANS YELLOW	37.50	23.95
MON41304	25 FT MONOKOTE TRANS BLUE	37.50	23.95
MON41401	25 FT MONOKOTE MET GREEN	43.75	27.95
MON41402	25 FT MONOKOTE MET BLUE	43.75	27.95
MON41403	25 FT MONOKOTE MET PLUMB	43.75	27.95

SOLARFILM

SolarFilm®

THE LIGHTEST, MOST DURABLE COVERING MATERIAL AVAILABLE FOR FLYING MODELS

WITH EXCLUSIVE NEW "LOW-HEAT" SENSITIVITY MAKING IT THE EASIEST AND SAFEST TO APPLY!

Eliminates all the tedious work of sealing, doping, sanding and polishing, while giving you a covering which is stronger, lighter, fuel- moisture- and stain-proof. It is easy to maintain, will not slacken, crack or become brittle for the life of your plane. It resists transportation handling better because of its flexibility, high puncture strength and scratch resistance.

SOLARFILM is a micro-thin, ultra light film of super-tough polymer (tensile strength of 25,000 lbs.sq./in.), coated on the underside with brilliant, fade-proof pigments and a specially formulated heat-sensitive adhesive. During manufacture, **SOLARFILM** is stretched bi-axially so that later application of heat (275-375 deg. F) jogs its thermo-memory and causes it to gently but firmly shrink. The heat also activates the epoxy-like, fuel-proof adhesive, tightly bonding the shrunk film to balsa, hardwoods, molded foams.

EXCLUSIVE SOLARFILM FEATURE: easiest of all films for smooth, compound curves, such as wing tips, cowling and wheel pants.

STEP BY STEP TECHNIQUE OF APPLYING SOLARFILM



Take a little extra time smoothing surfaces before applying SOLARFILM.

TOOLS

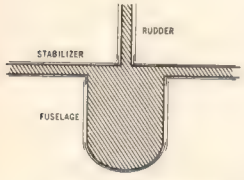
Razor blade or X-acto Knife

Fiber-tip marking pen or grease pencil

Any of the following heat applicators:
- Regular household iron
- Small travel iron
- Heat-sealing iron
- Heat Gun

(To take full advantage of the latest techniques we recommend both the small heat sealing iron and the heat gun. The iron tacks, smoothes and fits into tight places, while the gun shrinks and seals the larger, more open spaces.)

IF FILM IS FRESH AND STICKY — UNROLL AND LEAVE OPEN FOR ABOUT 24 HOURS BEFORE USE.



For best results, overlap SOLARFILM as shown.

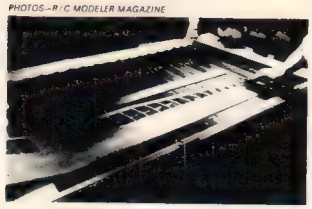
PREPARATION. Although the preparation of your model for covering with **SOLARFILM** is not at all critical, a little care will pay off in terms of final appearance. The smoother the surface to be covered, the more outstanding will be the finished results.

BARE BALSA OR HARDWOOD SURFACES should be sanded very smooth, progressing from coarse to fine sandpaper, used dry. Fill and sand all cracks, dings, gouges to even up the surface. You are eliminating the time necessary to apply sealers and dopes of a conventional finish, so take a little extra time at this point to do a super job of smoothing before applying **SOLARFILM.**

PRE-FINISHED SURFACES (doped, lacquered, enamelled, epoxy, etc.) need only to be sanded smooth. Because of the lower heat required to activate **SOLARFILM's** adhesive, it can be applied without blistering the old finish underneath. **CAUTION:** Be extra careful in smoothing the film, to eliminate trapped air bubbles. Should any develop, just prick them with a pin or knife point, then touch with your iron to shrink them into invisibility.

MOLDED FOAM SURFACES can also be easily covered without melting or bubbling the foam because of the **lower heat required** for **SOLARFILM.** No special preparation is required except for the usual sanding to provide a completely smooth surface.

PHOTOS—R/C MODELER MAGAZINE



Allow sufficient overlap around surface to be covered.



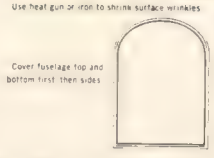
Iron edges with iron pulling out large wrinkles as you go, but do not pull material drum tight.



Do bottom first, then overlap top surface.



Use heat gun or iron to shrink surface wrinkles.



Cover fuselage top and bottom first, then sides.



Contrasting colors of SOLARFILM make an ideal trim.

APPLICATION. Set your iron at **low** or **Rayon** heat setting, and allow about ten minutes for it to reach a steady temperature. (The **HEAT-SEALING IRON** setting should be just under its hottest temperature.) **WHILE THE IRON IS HEATING, GO OVER SANDED SURFACES SEVERAL TIMES WITH A TACK RAG TO BE SURE THAT ALL SANDING RESIDUE AND DUST PARTICLES HAVE BEEN REMOVED!** Test the temperature of your iron on a **SAMPLE PIECE**...a slight darkening of the film should occur, which will disappear when heat dissipates and shrinkage occurs.

BEGIN BY APPLYING SOLARFILM to primary flight surfaces **FIRST,** such as **THE RUDDER** and **ELEVATOR,** in order to learn and develop your technique in applying **SOLARFILM.** Then progress to the larger **WING** surfaces. Lay out the **SOLARFILM SHEET,** plastic liner side **UP,** and lay the part to be covered on it. Mark the outline with grease pencil, then cut the film panel approximately 1" **LARGER CHORDWISE,** and 3" longer in **LENGTH.** It is recommended that the **BOTTOM** be covered **FIRST,** and that a single piece be used for bottom and another for the top. Wrapping one piece of **SOLARFILM** around the section to be covered is **not** recommended.

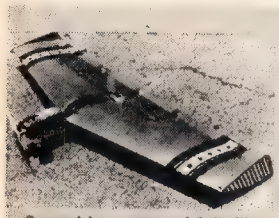
Peel off the plastic liner and smooth the panel into place with your fingers, which you will find quite easy as the adhesive is slightly tacky. Now, tack down the edges of the film with the toe of your iron, using a wiping action, **but no pressure**...barely touching the iron to the film. Begin on the leading and trailing edges, working from the center toward the root; then from the center toward the tip.

After the panel is tacked down all around the edges, you are ready to shrink the **SOLARFILM.** Start in the middle of the wing and, very lightly with the flat of the iron, work toward the edges. Small wrinkles may appear around the iron, but will disappear as the iron covers them. Apply heat to a small area at a time, and as it shrinks, rub down immediately with a pad of Kleenex so that the adhesive, now tacky from the heat, will adhere evenly to the balsa surface. Should a large wrinkle occur, heat the edge to un-tack the film, then pull gently to eliminate the wrinkle, and proceed. Should bubbles occur from trapped air, just prick them with a pin or knife-point, then touch with the iron to shrink them into invisibility. When you get to the wingtip, roll the iron gently over the edges while pulling gently. Trim off excess film from the edges with knife or razor blade. Using $\frac{1}{4}$" masking tape will help you get a really straight line. When the masking tape is pulled up the excess material comes with it, leaving a straight, almost invisible seam line.

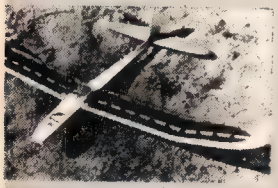
Repeat the process on the top of the section, overlapping the edges $\frac{1}{8}$" to $\frac{1}{4}$" all around for a firm, fuel-proof seal. Compound curves at the tips of wing and tail surfaces are covered by applying heat to the film to make it pliable, then gently pulling it over the tip, using the point of the iron to firm it into place. Repeat this process at intervals an inch or so along the tip until it has been completely sealed. Then, using heat gun and pad of Kleenex, finish and smooth out all wrinkles. Trim off excess and wipe clean as you did with the top section.

FUSELAGE. Do the top and bottom first, then the sides. Hand smooth the film first, then iron from the middle toward the edges and ends. Use your fingers to gently smooth and pull out the wrinkles ahead of the iron. We recommend that you seal any seams and edges inside the engine compartment with a good fuel proof epoxy to prevent any seepage of fuel under the film.

TRIM. Solarfilm itself makes an ideal and easily applied trim. Mark out the design on the backing sheet and cut out. Remove backing sheet, put a few drops of Solarfilm Solvent on a piece of cloth and wipe a light trace on the adhesive side to soften the adhesive but not dissolve it. Position trim, smooth with fingers and squeegee with a soft cloth. Seal with a cool or barely warm iron. Decals can be applied to Solarfilm without difficulty. For mix or match detailing, use AeroGloss Dope. **SOLARFILM SOLVENT** is a colorless, odorless liquid to be used only for trimming and patching... **IT IS NOT SUITABLE FOR USE AS A CLEANER.** Use alcohol or dope thinner for this purpose.



Covered in opaque red Solarfilm with black and white trim.



Fuselage and tail section in opaque white, with transparent blue wings.

FOR FOAM & BALSA MODEL AIRCRAFT

Try this super lightweight, durable, polymer covering that is fast becoming the choice of modelers the world over. Check-list these unique features—Fuel, moisture and stain proof...high puncture strength and scratch resistance...plus extreme flexibility... because of our exclusive LOW-HEAT sensitivity that makes application easy, even on the first try, on foam, balsa and hardwood ...even on those tough jobs like cowling and wheel pants. Solarfilm is now available in a wide range of OPAQUE, TRANSPARENT & METALLIC colors, and yes, completely illustrated step-by-step instructions included with every roll. Try them...they're a great cover story!

The Instructions shown above are a reduced copy of the actual instruction sheet provided with each roll of Solarfilm. Each roll of Solarfilm is 26 inches wide and 6 feet long. Solarfilm is available in 9 opaque colors, 4 transparent colors, and 3 metallic opaque colors. Also available is Solarfilm solvent which is used to adhere Solarfilm to itself for trim work.

Solarfilm colors match Pactra Aerogloss and Pactra Formula-U colors (see Paint Section) exactly so that you can "mix-and-match" between Solarfilm covered areas and painted areas. A great advantage for those glass fuse-foam wing ships.

Apply Solarfilm with a Sealector or Top Flite sealing iron and/or a Top Flite heat gun (see P-204). Also, Monokote trim sheets, numerals, and markings will work great on Solarfilm (see P-260).

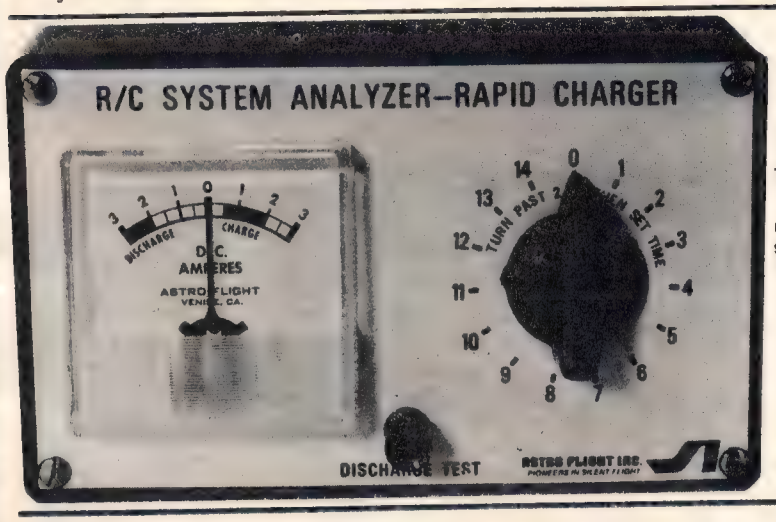
SOL46001	SOLARFILM #6001	BRIGHT RED	7.98	4.95
SOL46002	SOLARFILM #6002	DARK RED	7.98	4.95
SOL46003	SOLARFILM #6003	ORANGE	7.98	4.95
SOL46004	SOLARFILM #6004	YELLOW	7.98	4.95
SOL46005	SOLARFILM #6005	WHITE	7.98	4.95
SOL46006	SOLARFILM #6006	SILVER	7.98	4.95
SOL46007	SOLARFILM #6007	TROPIC BLUE	7.98	4.95
SOL46008	SOLARFILM #6008	MIDNIGHT BLUE	7.98	4.95
SOL46009	SOLARFILM #6009	BLACK	7.98	4.95
SOL46601	SOLARFILM #6601	TRANS RED	9.25	6.75
SOL46603	SOLARFILM #6603	TRANS ORANGE	9.25	6.75
SOL46604	SOLARFILM #6604	TRANS YELLOW	9.25	6.75
SOL46608	SOLARFILM #6608	TRANS BLUE	9.25	6.75
SOL47801	SOLARFILM #7801	METALLIC RED	10.50	7.55
SOL47810	SOLARFILM #7810	METALLIC GREEN	10.50	7.55
SOL47811	SOLARFILM #7811	METALLIC GOLD	10.50	7.55
SOL47999	SOLARFILM SOLVENT		.69	.65

Electronic Equipment

Electronic equipment will allow you to get the maximum use out of your R/C system. Items that are used with your R/C Equipment are the discharge analyzers and the expanded-scale voltmeters. Other items included in this section are power-panels and tachometers.

A battery discharge analyzer will allow you to check to see that the batteries in your system are holding their full-rated charge. If they are not doing so, then it is time to replace them. A discharge analyzer can also tell you how much of the batteries' capacity is being used each flight. Another useful device is the expanded-scale voltmeter. This device is meant to be used at the flying field. With it, you can tell what the battery voltage is at any time the plane is on the ground. Since the voltage of the battery will drop as it is being used, a voltmeter can help you determine just how closely you are flying to the end of the batteries' charge. These little devices read only on a small range of voltages, but this range is "expanded" onto a large scale so that you can read the voltage easily and accurately.

A power panel is a device that allows you to have a single-poing power source for all of your field support equipment. You can plug your starter, glow-plug wire and fuel pump into the power panel. This will eliminate unsightly wires that lead all over the plane, as well as eliminate a battery for each function you need. Some panels will even allow you to give your radios a quick-charge at the field.



ASTRO FLIGHT (AFI)

R/C SYSTEM ANALYZER–RAPID CHARGER

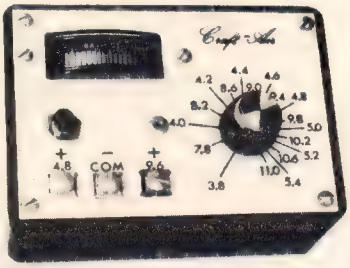
THE R/C RAPID CHARGER ANALYZER (Patent Pending)

The R/C System Analyser – Rapid Charger permits the R/C Flyer to determine the condition of his Transmitter and Receiver batteries at the field and should this be indicated to rapidly charge his batteries in 15 minutes at the field. More specifically the unit will

a) Indicate normal battery function
b) Indicate the presence of a high resistance cell
c) Indicate the presence of a shorted cell
d) Charge the flight battery in 15 minutes
e) Charge the transmiter battery in 15 minutes
f) Measure the remaining charge in these batteries in 10 min
g) Measure the capacity of fully charged batteries in 10 min

AFI10006 AFI ANALYZER-RAPID CHARGER 38.95 31.15

- Know how much safe flight time is available before each flight.
- Know the voltage available to the receiver and transmitter.
- Know the condition of the airborne battery.
- Know the condition of the transmitter battery.
- Plot a characteristic voltage vs time curve at simulated load.



VM-2

- Cycle the batteries to prevent memory.
- Detect shorted or weak cells before it's too late.
- Use the meter on any 4-cell (4.8 volt) Ni-Cad battery.
- Use the meter on any 8-cell (9.6 volt) Ni-Cad battery.

Built-in load simulates normal average flight battery load.
1 YEAR GUARANTEE

CRAFT-AIR

DUAL RANGE Expanded Scale Voltmeter

The only device which allows pilot to predict safe flight time available from receiver and transmitter Ni-Cads.

IT'S A FACT!

If you fly R/C, sooner or later you'll have a battery failure! There are just two ways to find that out:

1. CRASH YOUR AIRPLANE.
2. MEASURE THE POTENTIAL OF YOUR BATTERY BEFORE YOU FLY!

There is no more accurate, easier to use, less expensive, more versatile device available than the Craft-Air Dual Expanded Scale Voltmeter.

CRA90001 CRAFT AIR VM-2 VOLTMETER 24.95 18.70

GLOW PLUG ANALYZER

- INDICATES OPEN OR SHORTED GLOW PLUG, AND ENGINE FLOODING.
- ON-OFF SWITCH TO PREVENT ACCIDENTAL SHORTING.

Attaches to dry-cell battery. Rugged meter measures current flow through glow plug.



GPA-S

MODEL GPA-S for Square Battery, Part No. 200-119
MODEL GPA-R for Round Battery, Part No. 200-118

USING THE ANALYZER

By measuring the current flowing through the glow plug, the following can be determined:

1. Open or shorted glow plug.
2. Battery condition.
3. Engine flooding

Start with a new, fresh battery. Hook up the analyzer to the glow plug and turn the switch on. Note the meter reading for future reference with this type of glow plug. Comparisons with this reading will indicate the following:

(a) **Meter pegged:** shorted glow plug or hookup connection.
(b) **Meter reads zero:** open glow plug or hookup connection.

KRAFT

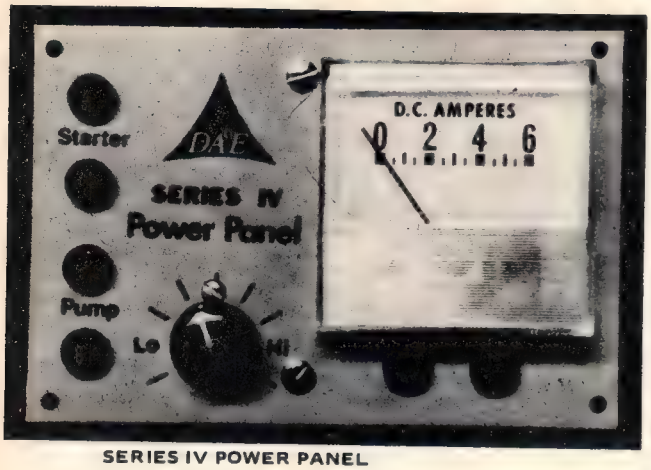
(c) **Low meter reading:** low battery voltage. Engine may not start. Note that a drop of 1 to 1½ divisions can indicate a weak battery.
(d) **Falling meter reading:** battery is old, worn out, or defective.
(e) **Slight increase in meter reading:** engine is flooded causing glow plug element cooling and lower resistance.

Be sure to switch battery on only after connection to engine and plug. Note reading to determine plug condition and proper connection. Switch battery off after starting engine and before removal of engine and plug connections to prevent accidental shorting.

KRA19101 KRAFT 200-119 SQ ANLZR GPA-S 7.98 6.75
KRA19102 KRAFT 200-118 RND ANLZR GPA-R 7.98 6.75

DA ENTERPRISES

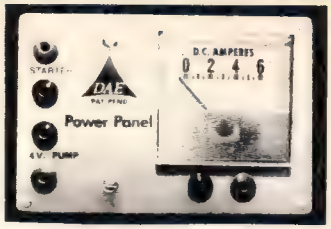
SERIES IV POWER PANEL



SERIES IV POWER PANEL

The series IV Panel is the "Top of the Line" of DAE Products. This transistorized solid state unit will power any 12v starter, any 4 - 12v fuel pump, and any 1½ - 2v glow plug or glow head, PLUS fast charge your radio in 15 minutes. It features variable glow plug and fast charger outputs. The ammeter monitors glow plug condition and battery charging.

DAE90000	DAE SERIES IV POWER PANEL	34.95	26.95
DAE90411	DAE SINGLE RANGE(4 OR 12 VOLT)	19.95	15.95
DAE90412	DAE DUAL RANGE (4 OR 12 VOLT)	24.95	21.25
DAE90500	DAE GLO-START PANEL	18.95	15.15

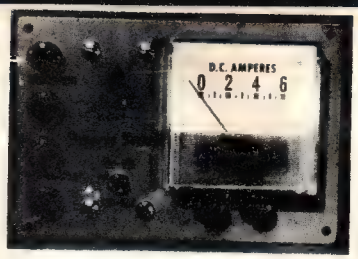


This is the original DAE Power Panel and still is the most popular. It features ammeter indication of plug condition as well as power for your starter, pump and plug.

Power Panel

POWER for your starter-pump-plug
AMMETER indication of plug condition
ALL from your 12-Volt battery

- **Battery Cord**
- **Mating Plugs**
- **3" x 5" Easy Mounting**



In addition to featuring two voltage current ranges for any glow plug or glowhead, now you can charge your radio at the field in 15 minutes.

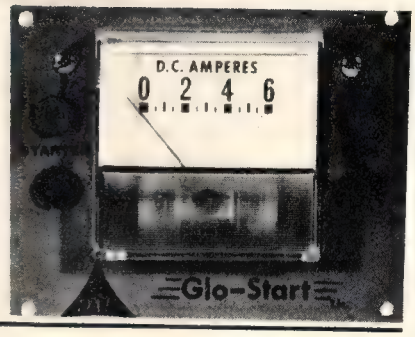
Dual Range Power Panel

POWER for any starter, pump, & plug
FAST CHARGE your radio at the field
ALL from your 12-Volt battery

- **Includes Hardware**
- **3" x 5" Easy Mounting**

GLO-START

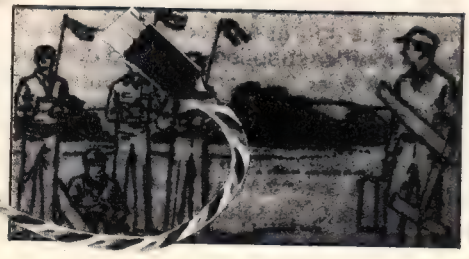
This is the newest unit in DAE's line of electronic products. It offers the efficiency of a glow driver and the convenience of a Power Panel. If you use a starter, then Glo-Start is for you! It is 100% solid state, featuring ammeter indication of glow plug condition. The glow plug circuit is automatically regulated, thus starting flooded engines with ease. The unit will operate the following: Any 12 volt starter, any 1.5v glow plug or glow head, and a 12v. fuel pump.



MRC



MRC80100 MRC REMOCALL MONITOR 24.95 22.45



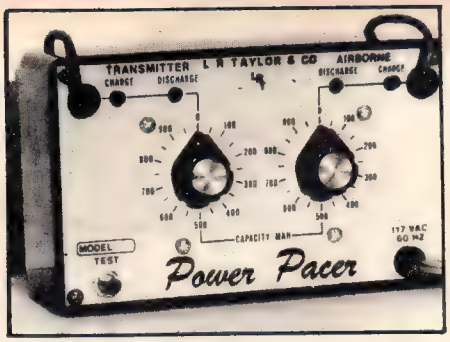
MRC's Remocall lets you know immediately if your frequency is in use
With your Remocall plugged into any unused channel, walk on the flying field, turn on your receiver, turn off your transmitter. And if someone else is flying on your frequency, Remocall will let you know so you can wait till the band is clear. It may also tell you if there is other interference that could disturb your radio link. And by the way, when you've had a long day flying and forget to turn off your receiver, Remocall will be heard loud and clear to tell you you're draining your battery after your transmitter is off the air.

MRC's Remocall can be used as a one man range tester
Simply plug the Remocall into an auxiliary channel, extend the transmitter antenna, turn on the power switch and leave your transmitter on the ground. Then, with your airborne switch on, take your aircraft and start pacing off distance downfield. Remocall's loud, clear, unmistakable signal will let you know when you're out of range.





Help locate an aircraft down in weeds or woods
Everyone has worried about it at one time or another, few fliers do anything about it. When your plane is down in tall weeds, or out of sight in grass or woods, Remocall can help locate it. Turn off your transmitter and MRC's Remocall will set up a clearly audible sound you can home in on several hundred feet away. The signal will continue until batteries are exhausted.



POWER PACER

Power Pacer is available in 3 models:
Model 200 — For systems with 6 volt transmitters such as Kraft "A" series.
Model 300 — For systems with 9.6 volt transmitters — standard on most lines.
Model 400 — For systems with 10.8 volt transmitters such as Cox/Sanwa.

PWR80060	POWER PACER 6 V MODEL 200	59.95	49.95
PWR80096	POWER PACER 9.6 V MODEL 300	59.95	49.95
PWR80106	POWER PACER 10.8 V MODEL 400	59.95	49.95

The Power Pacer was designed to provide the ultimate in a R/C battery tester. It will cycle, read capacity, find intermittent cells, as well as function as a charger. The Power Pacer is available in different models to cover all R/C systems no matter what the transmitter battery configuration, and for both domestic and foreign line voltage.

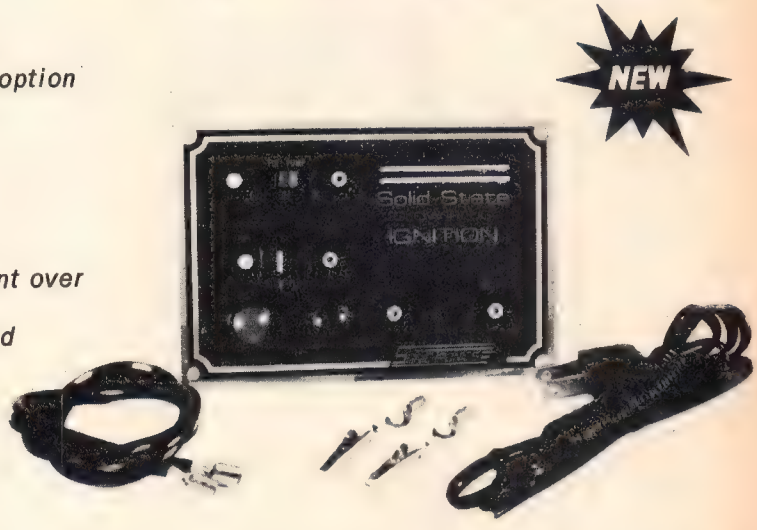
HERE ARE SOME OF THE FEATURES

1. No computing . . . The pointer indicates the capacity in M.A.H. of the battery under test and should read approximately its rated capacity. (Ex. A 500 M.A.H. Battery should read 500.)
2. Check batteries up to 1000 M.A.H.
3. Separate green and red L.E.D. charge and discharge indicators are used.
4. Checks for intermittent cells. If circuit switches from discharge to charge when battery is tapped, an intermittent is indicated.
5. Hi-Current discharge rate used . . . 500 M.A.H. battery takes only one hour for capacity test.
6. Models available for **All** radios without special wiring.
7. Transmitter and airborne checked at the same time.

SONIC-TRONICS

The most advanced design "Power Panel" ... Featuring .....

"SOLID STATE" Glow-Plug "IGNITION CIRCUIT"
"SOLID STATE" Glow-Plug condition "TEST CIRCUIT"
High Intensity "FIRE BALL" Indicators for System Status.
"NO ADJUSTMENTS" for all 1½ Volt Glow-Plugs, with the option to convert to 2 Volt Glow-Plug Operation. (see inst. sheet)
6 ft. Glow-Plug Power Cord, plugs into panel face.
Heavy Duty "BINDING POSTS" for Starter Connection.
Three Position "FUEL PUMP CONTROL SWITCH"
(1) Locks "ON" to pump fuel from the model.
(2) Center "OFF"
(3) "DEAD-MAN" or "NON-LOCKING" Position to prevent over filling and waste of fuel.
Power input and fuel pump power take off are neatly designed behind the power panel.
12 Volt Power Input and Fuel Pump Power take off's are neatly designed behind the Power Panel.
Complete with all "HARDWARE" nothing else to purchase.



STR90000	SONICTRONICS POWER CENTER	29.95	23.95



ROYAL

PHOTOCELL TACHOMETER

Featuring improved sensitivity, this instrument has three RPM range settings (0-6,000, 0-15,000, 0-30,000). Just point its telescoping probe at a rotating object to obtain RPM reading.

ROY19000	ROYAL PHOTOCELL TACHOMETER	34.95	31.45



"TICK OFF"
Fuel Shut Off Timer
0 to 25 Seconds

TATONE

The simplicity and un-equalled accuracy of the "TICK OFF" has made this the all time favorite of contest fliers.

Dial selected engine run, positive acting fuel shut off, and simple to attach. Weight is 3/4 oz.

Fuel line included.

TAT20001	TATONE #1 SHUT OFF TIMER	14.95	12.70

Electric Starters

While a starter can make starting easier, it can also be the cause for the ruin of many an engine. You must turn the engine over by hand so that you can feel the fact that nothing is going to prevent the engine from turning over when you apply the starter to it. On inverted engines, hydraulic lock, or fuel that has accumulated in the cylinder, can prevent the piston from descending properly, causing the probability of a bent connecting rod or worse.

When using a starter, you should not just apply the starter and hit the button, cranking until the engine fires. The best method is to pulse the starter in short bursts. This is easier on the engine, prevents flooding, and still spins the engine fast enough for it to start if it's ready. You should not use the starter to pull the fuel up to the carburetor. The engine should be prepared for starting in the same manner as if you were going to start it with a flip of the finger. The engine should start with a small blip of the starter.

If you have a balky engine, and it will not start unless you continually give prolonged cranking, you should investigate the problem, since the problem is certainly not endemic with model engines. Extreme balkiness is a symptom of a severe problem.

The starter really comes into its own on certain engines that start readily enough, but are downright dangerous to start by hand. These are the high-nitro, high power engines such as those that are used in Formula I events, and control-line speed events. These engines will fire and come around so fast that you cannot pull your hand out of the way fast enough. Use the starter here.

Boats also are a definite place for electric starters. You must have a pulley on the starter, and a groove on the flywheel of the boat, as well as a "V"-belt which must be looped around the flywheel and the starter. When you start the engine, you pull the belt tight, and pulse the starter. When the engine fires, you remove the starter, and put the belt into the boat, and put the boat into the water to keep the engine from overheating.

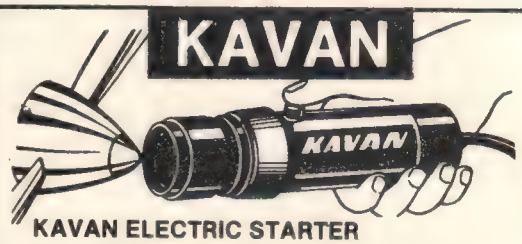
AFI



THE NEW MINI STARTER STARTS THE SMALL ONES FAST. Specially designed for quick sure starts for ½A glow engines, the mini starter features a 12 volt high speed permanent magnet motor with ball bearing front end. The drive cup is designed to fit the COX T.D. prop nut or a small spinner, a grove for a marine o ring is provided, and a rubber boot for starting jerobee cars. Replacement rubber cups and boots available.

AFI12000	AFI 1/2A MINI-STARTER	16.95	13.25

KAVAN



KAVAN ELECTRIC STARTER

Can be used for 6 V. as well as 12 V. Comes complete with alligator clips and a one piece plastic "V" belt for boat and helicopter applications.

KAV12100	KAVAN ELECTRIC STARTER	45.00	39.95
KAV12200	KAVAN REPLACEMENT RUBBER DRIVE	3.50	3.30

FUSITE



4.5 VDC charger available

Charger not included



BATTERIES INCLUDED

That's a fast description of the new GloBee Stinger—a compact, self-contained ½-A starter with its own built-in rechargeable lead acid batteries. This highly portable unit is not only more convenient but actually costs less than cumbersome starter-plus-battery combinations!

Its high torque, long-life motor develops 9,000 RPM free speed (5,000 RPM under load) with enough flywheel action to easily start any engine—hot or cold—from .010 to .051 cid. The rugged, fuel-proof case is fluted for a firm grip in all kinds of weather. Check out these other benefits:

- **special high torque motor designed for correct engine starting rotation**
- **resilient drive cup adapts to various engine sizes**
- **coaxial recharge jack prevents charging errors and battery damage**
- **anti-roll flange is also a finger stop**
- **integral flywheel shroud protects motor shaft and bearings**
- **plated flywheel drive cone assembly prevents rust**
- **ball thrust bearings**
- **industrially-rated on-off switch locks to prevent accidental starting**
- **all parts replaceable and easily accessible**

Lab tested to simulate years of operation and field tested at wind chill factors of −50° F., the GloBee Stinger is a fast starter, whether your engine is hot or cold. Its mobility is unmatched. It goes where you go! There's also a matching charger available.

Compare the GloBee Stinger with any other ½-A starter on the market. From sturdy construction to its affordable price, there's nothing like the cordless convenience of the GloBee Stinger!

BATTERIES: two 2 VDC, 2.5 amp-hour sealed lead acid

CHARGER: 4.5 VDC, 140 milliamp, 120 volt, 60 Hz; U.L. approved

RECHARGE: 14 to 24 hours normal charge time; 48 hours maximum

DISASSEMBLY: remove a few screws and the case separates into two halves

SIZE: 11½" long; 1¾" in diameter

WEIGHT: 28 ounces

FUS12001	GLOBEE GBES-1 1/2A STARTER	34.95	26.20
FUS12012	GLOBEE GBSC-12 STARTER CHARGER	7.95	6.75

SONIC-TRONICS

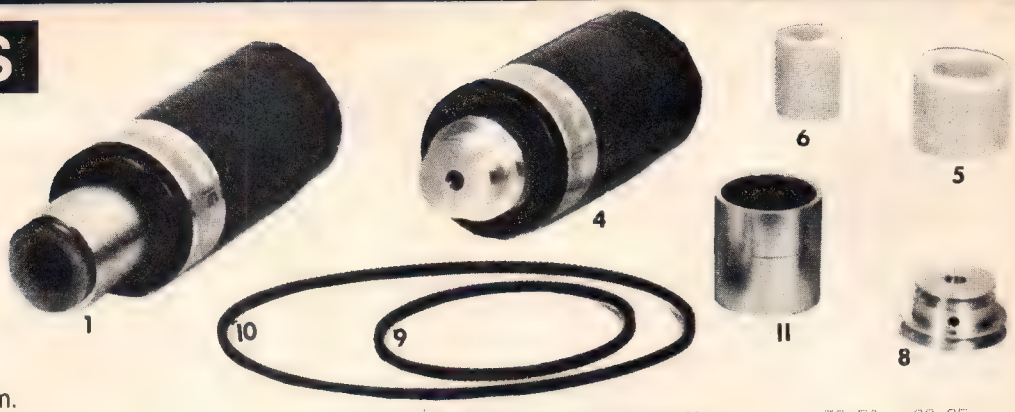
ELECTRIC STARTERS:

1) #100 Aircraft Starter
4) #101 Helicopter/Boat Starter

ACCESSORIES:

5) #200 Aircraft Starter rubber insert
6) #201 Spinnerless rubber insert
8) #203 Helicopter/Boat drive pulley
9) #204 Helicopter "V" belt — 300 mm.
10) #205 Boat "V" belt — 500 mm.
11) #206 Aircraft drive cup with insert

NOTE: Starters are being re-designed at press time. Check current magazines or literature.



STR12100	SONICTRONICS #100 STARTER	38.50	28.95
STR12101	SONICTRONICS #101 STARTER	38.50	28.95
STR12200	SONICTRONICS #200 ADAPTOR STD.	.98	.85
STR12201	SONICTRONICS #201 ADAPTOR	.98	.85
STR12203	SONICTRONICS #203 ADAPTOR HELI	4.95	4.45
STR12204	SONICTRONICS #204 BELT 300 MM	4.95	4.45
STR12205	SONICTRONICS #205 BELT 500 MM	4.95	4.45
STR12206	SONICTRONICS #206 ALUMINUM CUP	4.95	4.45

SULLIVAN

PYLON BRAND
REALLY STARTED SOMETHING WITH THESE BABIES

Here they are . . . the starters that changed buying habits of modelers overnight. No other hobby item has so completely taken over a market in such a short time. We knew we had developed an economical starter with super power and speed and we expected to do well in the U. S. but . . . thanks to you . . . we now have the #1 starter in the whole world. Merci. Gracias. Danken. Thank you.

PYLON BRAND HI-TORK, HI-RPM 12 VOLT STARTERS*

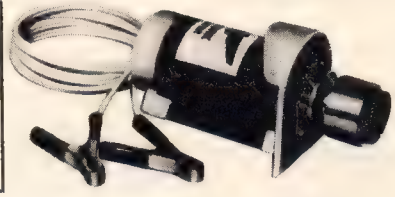
- heavy duty, long life motor.
- higher torque & RPM's than any other starter.
- "instant on" strip switch.
- hand guard for safety.
- 2 year guarantee.

*Patent pending.



STANDARD MODEL
Starts airplanes and cars. Features ¼-20 threaded metal insert molded in nylon cone, with ¼-20 lock nut for positive locking cone to shaft.

DELUXE MODEL
Starts helicopters, airplanes, boats and cars. Complete with all aluminum 4 in 1 starter cone and pulley.



For: Starting Airplanes & Cars

NEW "PYLON BRAND" HI-TORK, HI-RPM Standard 12 Volt Starter. (Code No. H.T.)

FEATURES:

1. Heavy duty, long life, 12 V Motor
2. Higher Torque & RPM's than any other starter. (More than enough power to start any engine.)
3. "Instant on" Strip Switch (Finger Tip Control).
4. Hand Guard (Keeps hands away from Propeller).
5. Pressure Grip (For Additional Forward Pressure to start the Engine).
6. Starter Cone: With ¼-20 Threaded Metal Insert Molded in Nylon Cone, with ¼-20 Lock Nut for Positive Locking Cone to Shaft.
7. Molded Rubber Insert (For: Both Spinner and Propeller starting).
8. All molded parts are of Nylon material.
9. A High Quality Starter guaranteed by The Pylon Brand Name.
10. 2 Year Guarantee (Service Charge Applies)

NO OTHER PRESENT DAY STARTER CAN COMPARE IN POWER, SPEED & PRICE — ASK THE MAN WHO OWNS ONE.

For: Starting Helicopters, Airplanes, Boats & Cars

NEW "PYLON BRAND" HI-TORK, HI-RPM Deluxe 12 Volt Starter. (Code No. H.T.D.)

FEATURES:

1. Heavy duty, long life, 12 V Motor.
2. Higher Torque & RPM's than any other starter. (More than enough power to start any size engine.)
3. "Instant on" Strip Switch (Finger Tip Control).
4. Hand Guard (Keeps hands away from propeller).
5. Pressure Grip (For Additional Forward Pressure to start the Engine).
6. Complete with: All Aluminum 4 in 1 Starter Cone and Pulley.
7. Molded Rubber Insert: (For: Both Spinner and Propeller starting.)
8. All molded parts are of nylon material.
9. A High Quality starter guaranteed by The Pylon Brand Name.
10. 2 Year Guarantee (Service Charge Applies).

NO OTHER PRESENT DAY STARTER CAN COMPARE IN POWER, SPEED & PRICE — ASK THE MAN WHO OWNS ONE

REPLACEMENT PARTS:

#RASP—Rubber adapter for H.T. starter
#RAC—Rubber adapter for H.T.D. starter
#4-A—Aluminum cone for H.T.D. starter

SUL12200	SULLIVAN ELECTRIC STARTER #HT	36.95	26.95
SUL12201	SULLIVAN DLX. STARTER #HTD	39.95	28.95
SUL12204	SULLIVAN RUB ADAPT SPINR #RASP	.79	.75
SUL12205	SULLIVAN RUBBER ADAPT CAR #RAC	1.25	1.20
SUL12206	SULLIVAN ALUM DRIVE CONE #4-1	4.95	4.50

Engine Accessories

Listed in engine accessories are the various items that are handy to have with your engine. This section includes the glow plugs you need for your various engines, carburetors, engine test stands, engine cleaners, and various items you may find useful.

The section that most people get confused is the one with all of the carburetors. Perry offers a great deal of different carbs. What you must realize is that there is a different carb for *each* engine. The "Small, Medium, and Large" business is only to help you decide which range carb you'll be needing, and it helps the dealer to price out his line.

Also, a much-needed item (judging from engines I see at the field) is the R+S engine cleaner. It works just fine, especially if you have an ultrasonic cleaner. Try it and see. A clean engine will look better, and believe it or not, it actually will run better and last longer!

Because of space limitations, I can't discuss all of the products here, so carefully look through the items displayed in this section, and I think you'll find almost everything you'll need for your engine here.

COX



330 ALL-PURPOSE STARTING KIT

Includes everything needed to get an engine started right. Contains ½ pint of Glow Power Fuel, filler hose and strainer cap, 1½ volt starting battery, glow head clip with wires, and a set of multipurpose .049 engine wrenches.

880 FLIGHT KIT

Includes everything needed to get a model plane started right. Contains ½ pint Flight Power Fuel, filler hose and strainer cap, 1½ volt starting battery, glow head clip with wires, and a set of multipurpose .049 engine wrenches.

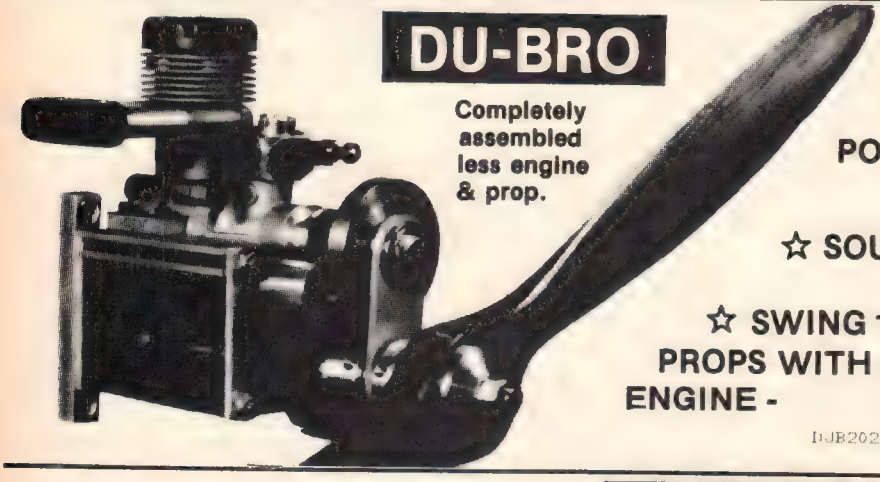
COX10330	COX 330 STARTING KIT FOR .049	5.25	4.65
COX10880	COX 880 AIRPLANE STARTING KIT	5.65	4.95
COX17002	COX 1032 GLOWHEAD ALL .020	1.50	1.45
COX17004	COX 302-1 GLOWHEAD REED .049	1.50	1.45

GLOW HEADS

A complete range of heads for all Cox engines including a new insert-type plug for the Conquest .15 and two new replaceable plugs for larger engines, one standard and one with idle bar.

COX17101	COX 1302 GLOWHEAD TEE DEE .010	2.35	2.25
COX17104	COX 1702 GLOWHEAD TD 49/51/QRC	1.95	1.85
COX17109	COX 2102 GLOWHEAD TEE DEE .09	2.95	2.80
COX17209	COX 2302 GLOWHEAD MEDALLION.09	2.85	2.70
COX17215	COX 1102 GLOWHEAD MEDALLION.15	2.85	2.70

DU-BRO



Completely assembled less engine & prop.

☆ BUD NOSEN PICKED THE DU-BRO **PROP DRIVE UNIT** TO POWER HIS NEW 102'' P-51-D MUSTANG! (BECAUSE IT REALLY WORKS !!!)

☆ SOUNDS LIKE A REAL AIRCRAFT ENGINE

☆ SWING 18'', 20'', 22'', AND 24'' GRISH BROS. PROPS WITH 8'' OR 10'' PITCH WITH YOUR .60 ENGINE -

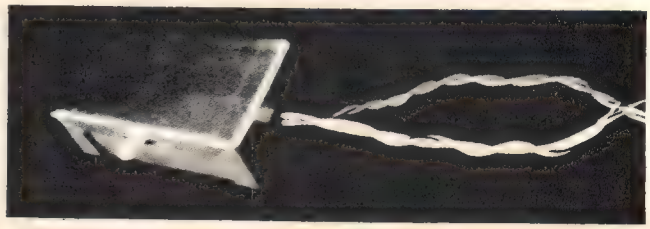
DUB20210	DUBRO 210 PROP DRIVE UNIT	100.00	79.95

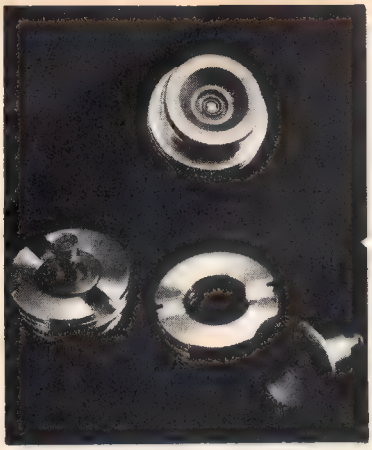
DUMAS

DUMAS SPEED CONTROL

At last there is an inexpensive, reliable and dependable proportional speed and direction control for electric powered RC boats. Complete with control arm, operated by any proportional servo, to provide infinitely variable smooth motor speeds in forward and reverse as well as a center "off" position. **No. 503**

DUM15030	DUMAS #503 SPEED CONTROL	22.95	19.50

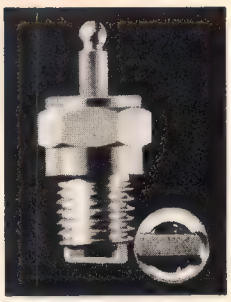




FUSITE

GloBee

½-A PLUGS: Prototypes immediately set new records! Get at least 1000 more RPM, greater power and longer life by replacing the plug in your popular ½-A engine with a new GloBee—at competitive prices! Racing models have new high strength coil; both Racing and Sport plugs have patented spiral tip and blow-proof glass seal. Change heads with standard wrench.



R/C Model

Users report an immediate increase in power by simply switching to a GloBee R/C plug. It features the same flat-wound spiral and superior glass-to-metal seals as the racing model for improved performance and longer life. An idle bar is added and a small cavity provided for smoother idle, better low speed characteristics, and ideal transition through the power ranges. R/C plugs come in two lengths—short (GB-2S) and long (GB-2L).

FUS15010	GLOBEE GB-5P 1/2A PLUG-SPORT	1.39	1.25
FUS15020	GLOBEE GB-5R 1/2A PLUG-RACING	1.79	1.60
FUS15100	GLOBEE GB-2S R/C SHORT PLUG	1.25	1.20
FUS15200	GLOBEE GB-2L R/C LONG PLUG	1.25	1.20



LUSTROX
NO. 90811

LUSTROX . . . mix with oil and dab in intake during first run, polishes running surfaces for more RPM and longer life.

FOX

PRESSURE FITTINGS

For use in tapping muffler or crankcase pressure for pressurized fuel systems. Machined from 3/16 inch HEX brass bar. small - neat. 4-40 or 6-32 threads.

4-40 thread PART NO. 90501
6-32 thread PART NO. 90502



GLOW PLUGS
The World's Finest



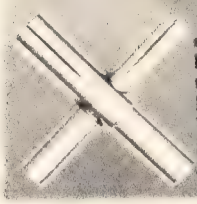


PROP SHAFT EXTENSIONS

Improved type extensions are now supplied with a special nut and washer so that a standard Fox spinner will fit right on. Nut and washer are made from steel and spool from aluminum alloy.

½" Long ¼-28 Thread #FOX16412
¾" Long ¼-28 Thread #FOX16413
½" Long 5/16-24 Thread #FOX16414
¾" Long 5/16-24 Thread #FOX16415

FOX FOUR WAY WRENCH



The Fox Four Way Wrench is a professional grade tool specifically designed for those who like the four way design but are not satisfied with the low grade die cast tools now on the market. The Fox Four Way Wrench is the finest you can buy. The beautiful chrome finish of the Fox Four Way Wrench doesn't work one bit better than if it were a dull, battle-ship gray, but it does a world of good for your morale and pride and isn't "pleasure" what modeling is all about?

FOX15101	FOX RC LONG PLUG-ONE ONLY	1.15	1.10
FOX15112	FOX RC LONG PLUG-ONE DOZEN	13.80	9.95
FOX15201	FOX RC SHORT PLUG-ONE ONLY	1.15	1.10
FOX15212	FOX RC SHORT PLUG-ONE DOZEN	13.80	9.95
FOX16410	FOX #90410 EXT. 10-32 X 1/2	2.25	2.15
FOX16411	FOX #90411 EXT. 10-32 X 3/4	2.25	2.15
FOX16412	FOX #90412 EXT. 1/4-28 X 1/2	2.50	2.40
FOX16414	FOX #90414 EXT. 5/16-24 X 1/2	2.75	2.60
FOX16415	FOX #90415 EXT. 5/16-24 X 3/4	2.75	2.60
FOX16413	FOX #90413 EXT. 1/4-28 X 3/4	2.50	2.40
FOX20501	FOX #90501 PRESSURE FTNG 4-40	.85	.80
FOX20502	FOX #90502 PRESSURE FTNG 6-32	.85	.80
FOX27104	FOX #70104 4-WAY WRENCH	7.95	7.15
FOX56811	FOX #90811 LUSTROX	.75	.70

GAS MODEL PRODUCTS

G-MOTOR KLEEN

Motor Kleen removes varnish found on clyinder heads and crankcases. Remove head and backplate then soak engine in MOTOR KLEEN overnight, then rinse while using a stiff brush to remove residue. Safe on all metal parts. Full directions on can, use with extreme care. 16 oz. can Will do many engines.



GAS10002	GAS MODEL PRODUCTS MOTOR KLEEN	4.98	4.70



K & B

K & B GLOW PLUG with IDLE BAR

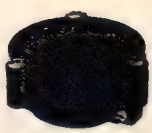
An improvement in the original "idle bar" glow plug. It can be recognized by its distinguishing "gold post." For controlled engine speed that will run at required given speed up to a constant maximum—for R/C. Carrier, and Scale Flying.

Note: Do not exceed 1½ volts.

K&B15301	K&B #4520 RC LONG PLUG (1)	1.40	1.20
K&B15312	K&B #4520 RC LONG PLUG *DOZEN*	16.80	12.00
K&B15401	K&B #7321 STD. SHORT PLUG (1)	1.40	1.20
K&B15501	K&B #7311 STD. LONG PLUG (1)	1.40	1.20

KRAFT

Custom developed for Kraft .61 engine. Greatly increase engine life with minimum power loss.
Part No. 200-135



KRA11135	KRAFT 200-135 61 AIR FILTER	2.98	2.80

MRC

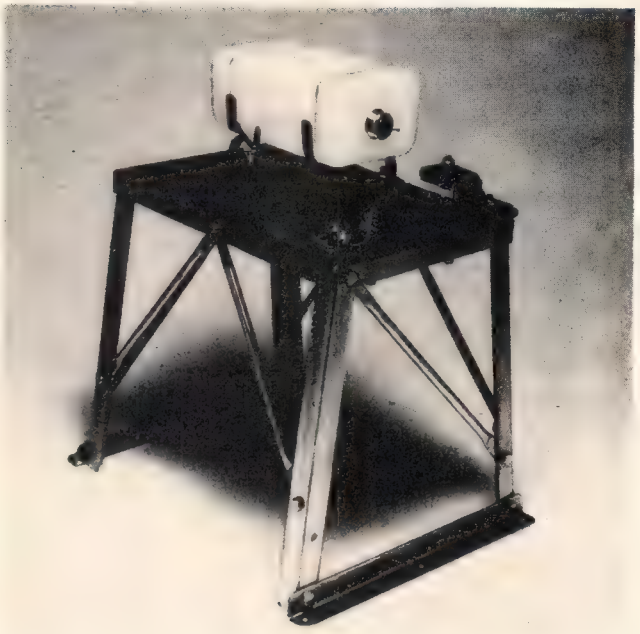
MRC-IM Test Bench Stand For Engines

FEATURES:
- Easy to Assemble
- Rugged All Steel Construction
- Maximum Rigidity and Durability
- Stand Comes With Metal Clips for Installation of 1000cc Fuel Tank
- Top is Predrilled to Accept the Throttle Lever Mounting Screws
- Stand Keeps Engines High Above the Ground to Prevent Dirt from Getting Into the Carburetor
- Compact for Easy Transportation and Storage
- Length: 12 inches; Height: 11 inches; Width: 8 inches
- Easily Adjustable to fit varying Crankcase Widths

FEATURES OF THROTTLE LEVER
- Used for Opening and Closing of the Carburetor when Engine is Installed on Test Stand
- Can be Locked to Lock the Throttle Valve of the Carburetor in Any Position

FUEL TANK:
- Capacity 1000cc (33.8 oz)
- Eliminates the Need to Constantly Refill the Tank During Break In

Available as a Complete kit as shown. Assembly time less than one hour.



MRC20010 MRC ENGINE TEST BENCH & STAND 44.95 35.95

PERRY



PERRY AIR CLEANER
Protects engine from airborne dirt and at the same time improves idle and provides a greater economy of fuel . . . fuel spray is drawn back into the carburetor.



Perry carburetors are very popular among modelers everywhere. The regular carbs are for replacement of existing carburetors on the engines listed (100, 200, and 300 series). The 800 and 900 series pressure pumps and carbs replace existing carb with a pressurized fuel system — they must be used as a pair. Perry air cleaners fit Perry carbs only — 100 and 200 series takes Medium, 300 series Large.

PER11101	PERRY CARB 101 ST G 60-71	15.95	12.95
PER11103	PERRY CARB 103 WEBRA 61	15.95	12.95
PER11104	PERRY CARB 104 VECO 61	17.95	14.50
PER11105	PERRY CARB 105 HP 61	15.95	12.95
PER11106	PERRY CARB 106 ST 60	15.95	12.95
PER11107	PERRY CARB 107 OS MAX 60	15.95	12.95
PER11108	PERRY CARB 108 ENYA 60	15.95	12.95
PER11109	PERRY CARB 109 ST 51-56	15.95	12.95
PER11112	PERRY CARB 112 KRAFT 61	15.95	12.95
PER11205	PERRY CARB 205 K&B 40	15.50	12.55
PER11206	PERRY CARB 206 ST 40-46	13.50	10.95
PER11207	PERRY CARB 207 OS MAX 40	15.50	12.55
PER11208	PERRY CARB 208 ENYA 45	13.50	10.95
PER11209	PERRY CARB 209 ST G 21-46	13.50	10.95
PER11210	PERRY CARB 210 HP 40	13.50	10.95
PER11211	PERRY CARB 211 WEBRA 40	13.50	10.95
PER11301	PERRY CARB 301 OS MAX 30,35	12.00	9.95
PER11302	PERRY CARB 302 OS MAX 25	12.00	9.95
PER11303	PERRY CARB 303 OS MAX 20	12.00	9.95
PER11305	PERRY CARB 305 OS MAX 15	12.00	9.95
PER11306	PERRY CARB 306 ST 20-23	12.00	9.95
PER11308	PERRY CARB 308 VECO 19	12.00	9.95
PER11313	PERRY CARB 313 ENYA 19	12.00	9.95
PER11401	PERRY PRES CARB 900 K&B 61	18.95	15.50
PER11402	PERRY PRES CARB 902 OS 60 BH	16.95	13.75
PER11403	PERRY PRES CARB 903 WEBRA 61	16.95	13.75
PER11405	PERRY PRES CARB 905 ST 51-60	16.95	13.75
PER11406	PERRY PRES CARB 906 ST G60-71	16.95	13.75
PER11407	PERRY PRES CARB 901 OS 60 FSR	16.95	13.75
PER11410	PERRY PRES CARB 910 WEB SP 61	16.95	13.75
PER11411	PERRY PRES CARB 911 KRAFT 61	16.95	13.75
PER11470	PERRY PRES CARB 907 K&B 40	18.95	15.50
PER11501	PERRY AIR CLEANER LARGE 51-71	1.95	1.75
PER11502	PERRY AIR CLEANER MEDIUM 15-50	1.95	1.75
PER11601	PERRY PRES PUMP 800 K&B 61	23.95	19.25
PER11602	PERRY PRES PUMP 802 OS 60 BH	23.95	19.25
PER11603	PERRY PRES PUMP 803 WEBRA 61	23.95	19.25
PER11605	PERRY PRES PUMP 805 ST 51-60	23.95	19.25
PER11606	PERRY PRES PUMP 806 ST G60-71	23.95	19.25
PER11607	PERRY PRES PUMP 801 OS 60 FSR	23.95	19.25
PER11610	PERRY PRES PUMP 810 WEB SP 61	23.95	19.25
PER11611	PERRY PRES PUMP 811 KRAFT 61	23.95	19.25
PER11670	PERRY PRES PUMP 807 K&B 40	23.95	19.25
PER11900	PERRY NEEDLE VALVES LG&MD CARB	1.20	1.15

R & S



"PERFECT" Model ENGINE CLEANER

"AT LAST" A new engine cleaner specially formulated not to harm model engine parts. Will not harm Perry carburetors, plastic parts, gaskets, ball bearings, and is non-irritating to skin.

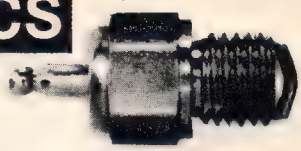
Perfect Engine Cleaner Removes:

- **Oil**
- **Varnish**
- **Dirt**

1 PINT

R+S10016 R+S HOBBY ENGINE CLEANER 16 OZ 2.49 2.25

SONIC-TRONICS

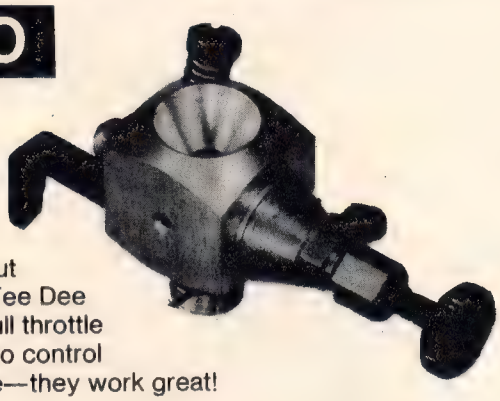


for the best
STARTING, IDLING and PERFORMANCE

"R/C PLUGS"
Special Platinum Alloy element insures the best in performance, dependability, easy starting and the lowest idling speed.
No. 300 Long Thread 1½V
No. 305 Short Thread 1½V

STR15300 SONICTRONICS RC LONG PLUG 1.29 1.25
STR15305 SONICTRONICS RC SHORT PLUG 1.29 1.25

TARNO



Tarno carbs are designed to fit Cox Tee Dee .049-.051 engines. Simply put one on and your Tee Dee engine will have full throttle control for full radio control operation. Try one—they work great!

TAR11000 TARNO AERO 1/2 A RC TARNO CARB 12.95 10.95

TOWER HOBBIES



These outstanding glow plugs are manufactured for Tower by the world's largest and finest glow plug manufacturer. They are the finest 1½ volt RC long plugs available at any price, and due to Tower's direct marketing the price is kept to the lowest price anywhere. These are first class plugs that have idle bars to keep your engine running smoothly. Try a dozen today!

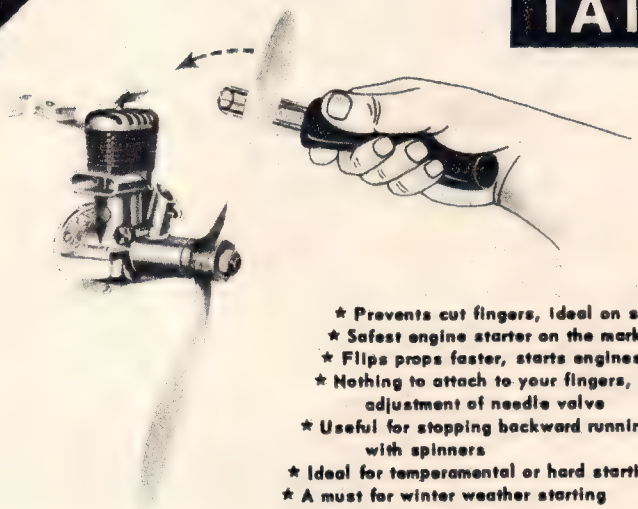
TOW15001 TOWER RC LONG PLUG -ONE ONLY- 1.20 1.05
TOW15006 TOWER RC LONG PLUG -SIX PLUGS- 7.20 4.80
TOW15012 TOWER RC LONG PLUG -ONE DOZEN- 14.40 8.40

"Chicken Stick" ENGINE STARTER

TATONE



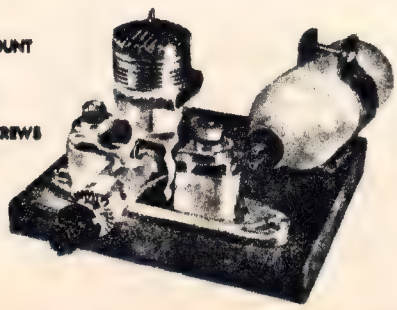
THIS *or* THIS



- ★ Prevents cut fingers, ideal on sharp nylon props
- ★ Safest engine starter on the market
- ★ Flips props faster, starts engines quicker
- ★ Nothing to attach to your fingers, hand is free for adjustment of needle valve
- ★ Useful for stopping backward running engines equipped with spinners
- ★ Ideal for temperamental or hard starting engines
- ★ A must for winter weather starting
- ★ For all classes, ½A to .60

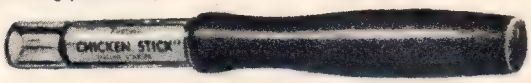
ENGINE TESTING UNIT

- CAST ALUMINUM ENGINE MOUNT
- FULLY ADJUSTABLE
- 4 OZ. TANK AND FITTINGS
- TANK MOUNTING BRACKET
- INCLUDES ALL MOUNTING SCREWS
- FITS ALL ENGINES, 1/2 A-.74



Special long lasting, non-marring plastic tip

Fuel resistant enameled handle



"Chicken Stick"

TAT20051 TATONE #51 CHICKEN STICK 1.45 1.40
TAT20080 TATONE #80 ENGINE TEST STAND 9.60 8.15

Engine Mounts

Proper use of an engine mount is extremely important in guaranteeing you a long life for your plane. It seems hard to believe that an engine mount can be used improperly, but it can. How many times have you drilled the holes for the mounting screws, only to find that they are not all straight, or located properly. Instead of replacing the mount and starting over, you just ignore the problem and mount the engine improperly. You have just taken the first step to shortening the life of your engine ... and at today's prices, nobody can do that for long!

All of the mounts we carry are good. They vary in types of materials they are made of, and shape, and of course, size. Kraft and Bridi mounts are made of Fibreglass-filled nylon that has been molded into the proper shape. They both come in a variety of sizes to fit almost any engine. They offer low price and light weight.

C.B. Associates and Fox both offer aluminum mounts. Both firms offer good, rugged mounts. The C.B. are of cast aluminum which has been machined to insure that the mounting beams are aligned and perpendicular to the firewall mounting plate. The Fox mounts are completely machined out of aluminum bar stock, and as such, have been carefully made to insure that their alignment is just right.

Aluminum mounts, while heavier than the nylon variety, are much more rugged, and can take more abuse. These mounts are also able to be drilled and tapped, relieving you of the necessity of having to use extra nuts and lock washers. The nylon mounts cannot be tapped, but must use screws, which are supplied with the mount.

In addition to their line of nylon mounts, Kraft has introduced a new line of cast aluminum mounts. Included in this line is a mount for their Kraft .61.

ACE



ACE 1/2A MOTOR MOUNT

Tired of breaking motor mounts on your 1/2A pattern or pylon ship? This rigidly braced molded nylon motor mount for Medallion and Tee Dee .049/.051's is almost indestructible. We back it up by saying: "Ace R/C will replace free of charge any 1/2A Motor Mount that breaks for any reason, including a crash!"

This unique mount has mounting ears for a nose gear if desired. Weighs only 5.7 grams (.2 oz.). Engine mounting hardware included.

MM Ace 1/2A Motor Mount

ACE14010	ACE MM 1/2 A MOTOR MOUNT	1.19	1.15

BRIDI

FIREWALL ENGINE MOUNTS

Made of molded glass-filled nylon



- MOUNTS ENGINE VERTICALLY OR AT 90 or 45°
- CAN BE DRILLED FOR NOSEGEAR
- FLAT SURFACE FOR NOSEGEAR COLLARS
- TOP AND BOTTOM OF ARMS PARALLEL FOR ENGINE MOUNT SCREW NUTS
- OCTAGONAL DESIGN FOR EASY ALIGNMENT

FOR ENGINE SIZES .05, .09, .15, .19, .40, .60, and .60 WITH PUMP

BRI14005	BRIDI ENGINE MOUNT 05	2.19	2.10
BRI14009	BRIDI ENGINE MOUNT 09	2.39	2.30
BRI14015	BRIDI ENGINE MOUNT 15	2.49	2.40
BRI14019	BRIDI ENGINE MOUNT 19	2.79	2.60
BRI14040	BRIDI ENGINE MOUNT 40	2.89	2.70
BRI14060	BRIDI ENGINE MOUNT 60	3.28	3.10
BRI14061	BRIDI ENGINE MOUNT 60L	3.49	3.30

C.B. ASSOCIATES

ALUMINUM ENGINE MOUNTS





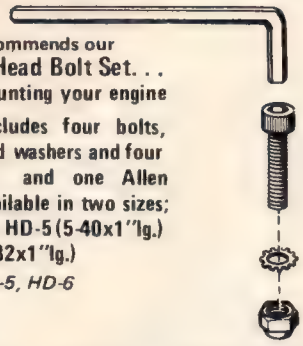
Cast aluminum, heat treated and machined flat for all the popular engine sizes, these mounts are guaranteed against breakage. Sizes .15 through .60F range from $4.65 to $5.95 each. Two NEW sizes, .60R and .80, have fluted sizes to lighten them — same guarantee as heavier mounts.

REMEMBER, guaranteed replacement.

CBA14049	C B MOUNT 1/2A-SHORT #5401	2.45	2.30
CBA14050	C B MOUNT 1/2A-LONG #5402	2.55	2.40
CBA14150	CB ASSOCIATES MOUNT .15 #5301	4.65	4.20
CBA14151	CB ASSOCIATES MOUNT .15R #5302	4.85	4.40
CBA14200	CB ASSOCIATES MOUNT .20 #5303	4.75	4.30
CBA14300	CB ASSOCIATES MOUNT .30 #5304	4.85	4.40
CBA14400	CB ASSOCIATES MOUNT .40 #5305	4.95	4.50
CBA14401	CB ASSOCIATES MOUNT .40R #5306	5.95	5.35
CBA14600	CB ASSOCIATES MOUNT .60 #5307	5.95	5.35
CBA14601	CB ASSOCIATES MOUNT .60R #5308	6.25	5.75
CBA14800	CB ASSOCIATES MOUNT .80 #5309	6.25	5.75

EDSON

EDSON Socket Head Hardened Bolt Set



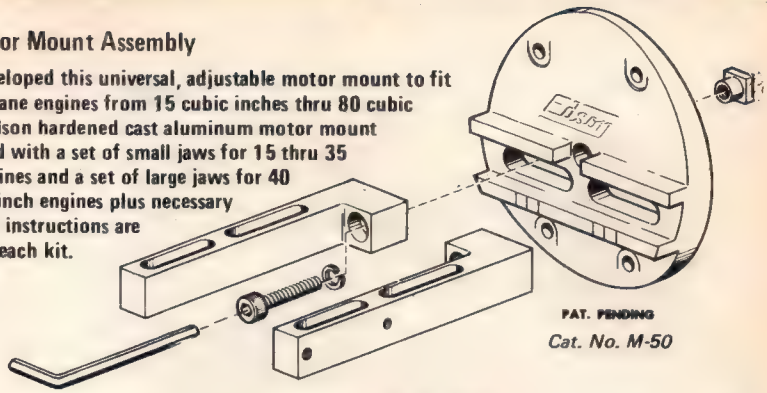
EDSON recommends our
Socket Head Bolt Set. . .
. . . for mounting your engine

Package includes four bolts, four serrated washers and four lock nuts, and one Allen wrench. Available in two sizes; Edson Series HD-5 (5-40x1"lg.) or HD-6 (6-32x1"lg.)

Cat. No. HD-5, HD-6

EDSON Motor Mount Assembly

Edson has developed this universal, adjustable motor mount to fit all model airplane engines from 15 cubic inches thru 80 cubic inches. The Edson hardened cast aluminum motor mount comes supplied with a set of small jaws for 15 thru 35 cubic inch engines and a set of large jaws for 40 thru 80 cubic inch engines plus necessary hardware. Full instructions are included with each kit.



PAT. PENDING

Cat. No. M-50

EDS14001	EDSON ADJUSTABLE MOTOR MOUNT	6.95	6.25
EDS27540	EDSON H-5 MNTG. SCREWS 5-40X1	.98	.95
EDS27632	EDSON H-6 MNTG. SCREWS 6-32X1	.98	.95

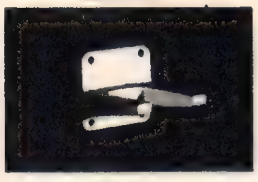
FOX



LARGE



MEDIUM



SMALL

MACHINED FROM BAR

The Fox Motor Mounts are lighter, stronger, and more rigid than cast mounts or ones made from fiberglass filled plastic. Destructive vibration is reduced with a rigid motor mount - and Fox is the strongest - most rigid you can buy.

In the event that you make a crash landing, if a motor is supported by a good sturdy Fox Mount the crankcase is often saved. A mount that will give away first on one mount and then the other, twists and ruins the crankcase. An advantage of the Fox Mount over wood mounts is that thrust changes can easily be made. If the mount is attached to the fire wall with blind nuts all you have to do is to loosen the four screws from the front, insert a shim under the top or sides. In this way very precise thrust adjustments can be made.

LARGE SERIES	
Part No.	**Width**
50601	1.475
Fits OS 60, S.T. 51, S.T. 56, S.T. 60, Enya 60, Merco 60	
50602	1.525
Fits Fox Eagle, Fox Hawk, Veco 60, Webra 61, H.P. 61	
50603	1.640
Fits Fox 74, Fox 78, S.T. G-60	
50604	1.720
Fits Enya Schneurle, Rossi 60	

MEDIUM SERIES	
Part No.	**Width**
50401	1.217
Fits Fox .29 new, Fox .36 new, Fox .35 all, OS .30	
50402	1.281
Fits Fox .36X all, Fox .36 BB all, S.T. .35 stunt	
50403	1.320
Fits K&B 35, K&B 40, OS 35, OS 40	
50404	1.385
Fits Fox 40, S.T. 35 R/C, S.T. 40 R/C, Webra 40	

SMALL SERIES	
Part No.	**Width**
50201	1.000
Fits Fox .15, OS .15	
50203	1.135
Fits Fox 15 Schneurle, Fox 19, Fox 25, S.T. 19, S.T. 23, OS 19	
50204	1.217
Special for Fox 35 Stunt	

FOX14201	FOX #50201 ENGINE MOUNT	4.50	4.05
FOX14203	FOX #50203 ENGINE MOUNT	4.50	4.05
FOX14204	FOX #50204 ENGINE MOUNT	4.50	4.05
FOX14401	FOX #50401 ENGINE MOUNT	5.00	4.50
FOX14402	FOX #50402 ENGINE MOUNT	5.00	4.50
FOX14403	FOX #50403 ENGINE MOUNT	5.00	4.50
FOX14404	FOX #50404 ENGINE MOUNT	5.00	4.50
FOX14601	FOX #50601 ENGINE MOUNT	5.50	4.95
FOX14602	FOX #50602 ENGINE MOUNT	5.50	4.95
FOX14603	FOX #50603 ENGINE MOUNT	5.50	4.95

TATONE



TATONE TANK-MOUNT

THIS ENTIRELY NEW ½A TANK-MOUNT COMBINES EVERYTHING INTO ONE COMPLETE UNIT....ENGINE MOUNT, TANK and LANDING GEAR.

The usual problems of installing a tank and landing gear are completely eliminated and hours of time are saved. Simply bolt the unit to the firewall – that's it!

- ★ Completely redesigned....larger capacity tank, heavy duty beams, three hole mounting.
- ★ Lighter weight, die-cast aluminum housing.
- ★ Bright polished finish.
- ★ Detachable landing gear included.

TAT20033	TATONE #33.5 .049 TANK MOUNT	7.95	7.15

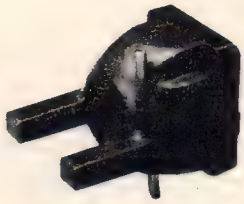
GOLDBERG



Nylon motor mount for Cox plastic plane Kit .049's

GBG27501	GOLDBERG EB1 ENGINE BRACKET	.69	.65

COX

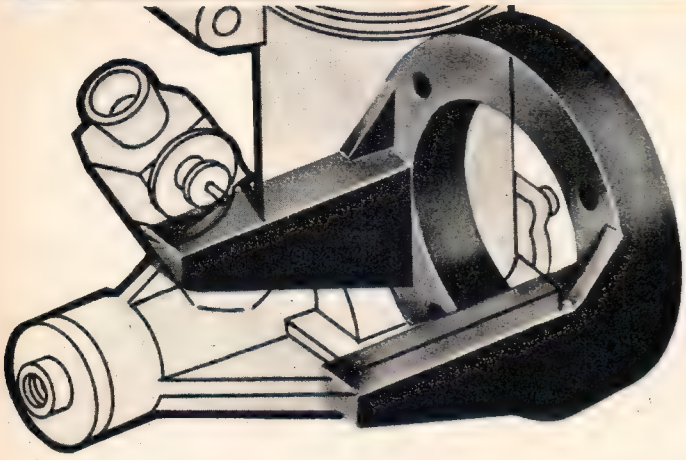


TANK MOUNT

TANK MOUNT

Rugged injection molded Delrin tank mount for Tee Dee .049, .051 and Medallion .049 engines. Cross filler tubes allow inverted flight without spilling fuel. Complete with mounting screws. Capacity is 10cc.
Cat. No. 2440

COX14440	COX 2440 TANK MT-TD & MED .049	4.35	4.15

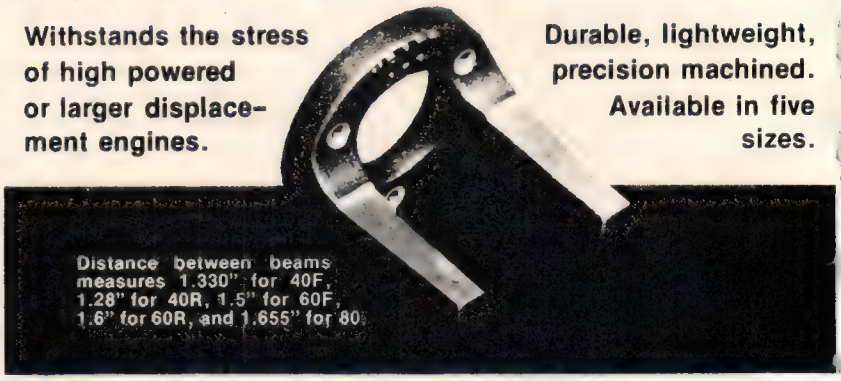


KRAFT

New! ALUMINUM ENGINE MOUNTS

Withstands the stress of high powered or larger displacement engines.

Durable, lightweight, precision machined. Available in five sizes.



Molded from high-strength glass-filled nylon, these are the finest engine mounts available. They are light weight and feature accurate alignment, low vibration levels and easy installation. Engine mounting screws are self locking in this material and will not loosen under vibration. They are available in 12 sizes to fit all popular engines.

MOTOR MOUNT	BEARING MOUNT SIZE RANGE	MOUNTING SCREW SIZE	ENGINE SIZE
KM-05	.550" to .645"	2x3/8	COX 049
KM-09	.800" to .890"	2x3/8	O.S. 09 COX 09
KM-15	.925" to .965	4x⅜	O.S. 15 O.S. 10 COX 15 FOX 15 ENYA 09
KM-15R	1.000" to 1.135"	4x½	K&B 15 RR
KM-19B	1.010" to 1.100"	4x½	ENYA 19 ENYA 15
KM-19	1.080" to 1.180"	4x½	VECO 19 McCOY 10 O.S. 19
KM-30	1.140" to 1.220"	4x5/8	O.S. 35 O.S. 30
KM-40R	1.300" to 1.330"	4x5/8	K&B 40 RR O.S. 40 RR S.T. 40 RR
KM-40	1.265" to 1.325"	4x5/8	S.T. 40 FR S.T. 46 S.T. 35 VECO 35 MERCO 29 MERCO 35 K&B 35 K&B 40 FR K&B 45 O.S. 40 FR FOX 36X ENYA 29 ENYA 35
KM-60B	1.470" to 1.550"	6x¾	KRAFT 61 WEBRA 61 VECO 61 HP 61 FR ENYA 60
KM-60A	1.400" to 1.480"	6x¾	VECO 50 MERCO 49, 61 MERCO BLACK STREAK 49, 61 FOX 59
KM-70	1.620" to 1.700"	6x¾	O.S. 80 RR S.T. G60 ROSSI 60 RR FOX 61, 74

Manufacturer of the World's Finest Proportional R/C Equipment
KRAFT SYSTEMS, INC.
P.O. BOX 1268 · 450 WEST CALIFORNIA AVENUE
VISTA, CALIFORNIA 92083 · (714) 724-7146

KRA14050	KRAFT 200-059 ENGINE MT KM-05	2.19	2.00
KRA14090	KRAFT 200-060 ENGINE MT KM-09	2.39	2.20
KRA14150	KRAFT 200-061 ENGINE MT KM-15	2.49	2.30
KRA14155	KRAFT 200-103 ENGINE MT KM-15R	2.79	2.50
KRA14190	KRAFT 200-062 ENGINE MT KM-19	2.79	2.50
KRA14191	KRAFT 200-063 ENGINE MT KM-19B	2.79	2.50
KRA14300	KRAFT 200-064 ENGINE MT KM-30	2.89	2.60
KRA14400	KRAFT 200-065 ENGINE MT KM-40	2.98	2.70
KRA14401	KRAFT 200-066 ENGINE MT KM-40R	3.29	3.00
KRA14601	KRAFT 200-067 ENGINE MT KM-60A	3.29	3.00
KRA14602	KRAFT 200-068 ENGINE MT KM-60B	3.29	3.00
KRA14700	KRAFT 200-069 ENGINE MT KM-70	3.49	3.20
KRA14832	KRAFT 200-132 ALM MT KRA+WEB61	7.98	7.45
KRA14863	KRAFT 200-163 ALUM ENG MT .40F	5.49	4.95
KRA14864	KRAFT 200-164 ALUM ENG MT .40R	5.49	4.95
KRA14865	KRAFT 200-165 ALUM ENG MT .60F	5.98	5.40
KRA14866	KRAFT 200-166 ALUM ENG MT .60R	5.98	5.40
KRA14867	KRAFT 200-167 ALUM ENG MT .80	5.98	5.40



Rugged cast aluminum engine mount, drilled and tapped for Kraft .61 engine.
Part No. 200-132 .

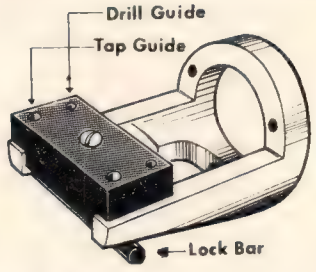
PRATHER

Drill Jig–Tap Guide

ENGINE TEMPLATE

The Drill Jig has a lock bar on the bottom to hold the Jig in place while you drill and tap your motor mount holes. Two holes in the Jig guides your drill bit. To make sure the holes are drilled straight, two other larger holes guides the tap so tap goes in straight. The drill Jig is made of a case hardened steel block and will last for years. The drill Jig is for metal or wood mounts. Save only one motor mount or engine case and the drill Jig will pay for itself.

No more goofed up motor mounts or egg shaped holes in your engine cases when you use the drill Jig and Tap Guide.



PRA21210	PRATHER #121 DRILL JIG VECO 61	5.95	5.25
PRA21220	PRATHER #122 DRILL JIG VECO 19	5.95	5.25
PRA21230	PRATHER #123 DRILL JIG K&B 40	5.95	5.25
PRA21250	PRATHER #125 DRILL JIG ST 60BH	5.95	5.25
PRA21260	PRATHER #126 DRILL JIG S(21-46	5.95	5.25
PRA21280	PRATHER #128 DRILL JIG HP 40	5.95	5.25
PRA21290	PRATHER #129 DRILL JIG OS 60	5.95	5.25
PRA21300	PRATHER #130 DRILL JIG OS 40	5.95	5.25
PRA21310	PRATHER #131 DRILL JIG WEB61BH	5.95	5.25

Engine mufflers.

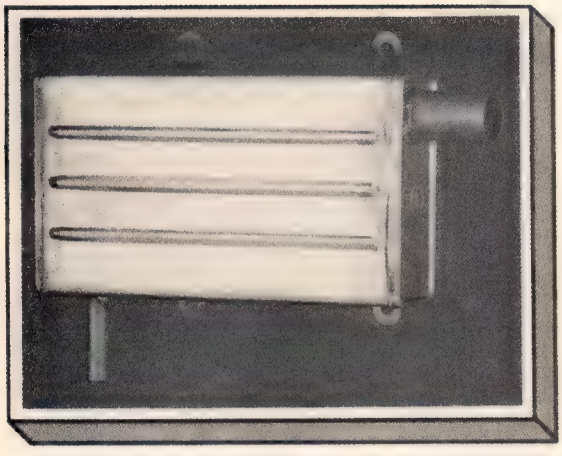
R/C flying is a noisy sport. So noisy, that many clubs have been in danger of losing their flying fields unless something is done. The muffler can help alleviate the problem.

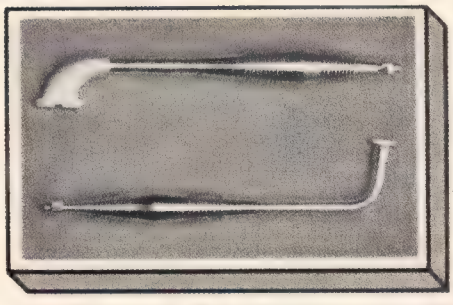
The price of muffling an engine, though, is power, and every muffler causes some loss of power from the engine. The difference between mufflers is the amount of silencing versus the penalty in power they exact.

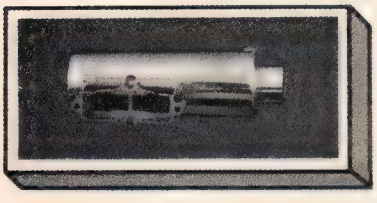
A flow-through muffler has an opening in the front that goes clear through to become the tailpipe. The main body of the muffler surrounds this tube. The action of the air flowing through the muffler aids the removal of exhaust gases. The gases are mixed with outside air and are cooled. This helps silencing. Even so, a flow-through muffler offers the smallest noise reduction but also with the lowest power loss.

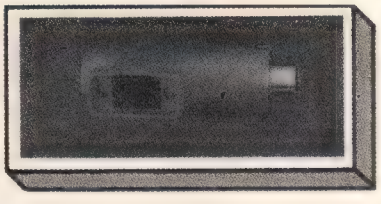
An expansion muffler works because the large expansion chamber allows the exhaust gases to expand and cool off a little before they exit the tailpipe. This also works to muffle. Also important is the size of the tailpipe. The greater the resistance to the flow of exhaust gases out of the muffler, the better the muffling effect . . . but also the greater power loss.

A tuned pipe is the best way to go for noise reduction versus power. Properly used, a pipe will allow a large reduction in noise, with an *increase* in power. This is because the tuned pipe works with the pressure pulses generated by the engine to make it more efficient in allowing the exhaust gases to escape from the engine. It also helps in pulling the fresh charge of fuel and air into the cylinder. For a better discussion of tuned pipes, see some of the modeling magazines of recent months.









FOX

SILENCE IS GOLDEN

At least when the neighbors are screaming:

America is becoming more and more noise pollution conscious. If we are to retain our flying fields we must fly with lower and lower noise levels. Fox has taken the initiative in developing America's first aftermuffler. This bolt-on piece of equipment can be used with any engine and muffler now on the market. One for 15-19 size motors, one for 25-40 size motors, and one for 45-60 size motors. The housing size is the same and the various capacities are obtained by varying the inlet and outlet sizes and baffle design. They are mounted directly to the fuselage side and attached to your standard engine muffler with a piece of flexible silicone tubing. The added weight is very little.The power loss is usually in the neighborhood of 300 RPM. And the muffler gives you an added noise reduction of about 5 D.B.. If noise is a problem, a Fox AfterMuffler is your solution.

Fox also offers traditional engine mufflers for each Fox engine except the 78RC. These silencers reduce the audible noise level coming from your engine by about 5-7 DB.

The Fox Tuned Pipe is as near a miracle as you are likely to experience. Simply bolt it on your motor and presto: 1 — more power — 500-700 RPM in many cases; 2 — more quiet; 3 — less fuel consumption.

The attaching fittings can usually be easily modified to fit other brand motors of similar displacement. In the case of our 60 size, it will fit a Webra or Super-Tiger with no alterations.

90311 Aftermuffler For 15-19 Engines .....
90312 Aftermuffler For 25-40 Engines .....
90313 Aftermuffler For 45-60 Engines .....

90301 Tuned Muffler (Fox 15 Schneurle) .....
90302 Tuned Muffler (Fox 40 & 45) .....
90303 Tuned Muffler (Fox Eagle and Hawk) .....

Fox Silencers — Conventional Type

90212 Silencer — Size A .....
90222 Silencer — Size B .....
90232 Silencer — Size C .....

90242 Silencer — Fox 15 Schneurle .....
90252 Silencer — Fox 40 & 45 Schneurle ....

SIZE	WT.	FITS	PRICE	STYLE	PART NO.
A	1-1/8 oz.	FOX 15,		OPEN FRONT CLOSED FRONT	90211 90212
B	1-3/8 oz.	FOX 19, FOX 25, FOX 29 FOX 35 STUNT FOX 36		CLOSED FRONT	90222
C	1-5/8 oz.	FOX EAGLE 60 FOX FALCON 60		CLOSED FRONT	90232

FOX16211	FOX #90211	MUFFLER .15 FT	5.95	4.95
FOX16212	FOX #90212	MUFFLER .15 EXP	5.95	4.95
FOX16222	FOX #90222	MUFFLER .19-.36 EXP	7.95	6.50
FOX16232	FOX #90232	MUFFLER .60 EXP	9.95	7.95
FOX16242	FOX #90242	MUFFLER .15 SCHNURL	5.95	4.95
FOX16252	FOX #90252	MUFFLER .40&.45 SCH	7.95	6.50
FOX16301	FOX #90301	TUNED MUFFLER 15	15.95	12.95
FOX16302	FOX #90302	TUNED MUFFLER 29-45	19.95	15.95
FOX16303	FOX #90303	TUNED MUFFLER 60-78	24.95	19.95
FOX16311	FOX #90311	AFTERMUFFLER 15-19	8.95	7.95
FOX16312	FOX #90312	AFTERMUFFLER 25-40	8.95	7.95
FOX16313	FOX #90313	AFTERMUFFLER 45-60	8.95	7.95

ENGINE MUFFLERS



COX



EXHAUST EXTRACTORS:

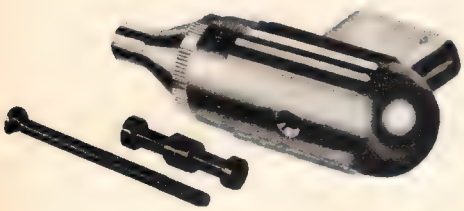
For Conquest .15 and .40 engines. Comes equipped with die-cast exhaust port adapter with 15^0 angle to point extractor tube outside cowl (A).

MUFFLERS:

Cox mufflers are designed to attenuate objectionable sound levels with minimum loss of power. Available for all Cox engines except the Tee Dee .010 (B). Die-cast aluminum mufflers for the Conquest engines feature oversize expansion chamber with internal baffle tube (C).

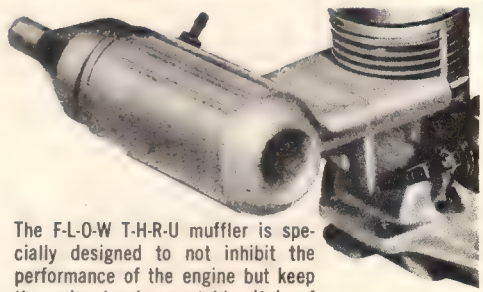
COX15015	COX 2890 EXTRACTOR CONQUEST 15	4.95	4.60
COX16002	COX 2620 MUFFLER FOR .020	3.10	2.95
COX16004	COX 2630 MUFFLER FOR .049	4.05	3.85
COX16009	COX 2640 MUFFLER FOR .09	3.75	3.55
COX16015	COX 2650 MUFFLER FOR .15	3.75	3.55
COX16115	COX 2861 MUFFLER-CONQUEST .15	7.95	7.15

K & B



Round out your power plant with the K & B muffler designed specifically for the K & B .19R/C. It reduces exhaust noise to conform with standards now mandatory at many fields.

K&B .19 R/C MUFFLER
#K&B16507



The F-L-O-W T-H-R-U muffler is specially designed to not inhibit the performance of the engine but keep the noise level acceptable. It is of rugged construction, contemporary in design, and fitted with a pressure tap.

K&B .61 R/C MUFFLER
#K&B16519

K&B16507	K&B #6507 MUFFLER K&B .19	7.50	6.00
K&B16519	K&B #6519 MUFFLER K&B .61	12.50	10.50

O.S. MAX

OS-744 60FSR · OS-743 40SR · 40FSR 45RSR · 45FSR-H · OS-704 60-80 · OS-703 S30R/C-40R/C · OS-702P 15-25 · OS-741 10



O.S. Max mufflers are designed for and fit only O.S. Max engines. The 702, 703, and 704 models are strap-on type and the 741, 743, and 744 models are bolt-on. All are expansion type design.

OSM16702	OS MAX MUFFLER #702 (15,20,25)	8.50	7.65
OSM16703	OS MAX MUFFLER #703 (30,35,40)	11.95	10.15
OSM16704	OS MAX MUFFLER #704 (60,80)	12.95	10.95
OSM16741	OS MAX MUFFLER #741 BOLT-ON-10	8.95	7.60
OSM16743	OS MAX MUFFLER #743 (40SR&FSR)	12.95	10.95
OSM16744	OS MAX MUFFLER #744 (60FSR)	12.95	10.95

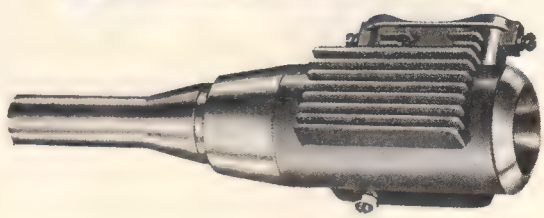
ENYA

These Enya mufflers are specifically designed for Enya engines only. All are expansion type which are very effective silencers.



ENY16090	ENYA MUFFLER M-90 FOR 09	5.50	5.20
ENY16100	ENYA MUFFLER M-100 FOR 15-19	6.98	6.65
ENY16200	ENYA MUFFLER M-200 FOR 29-45	9.25	8.80
ENY16300	ENYA MUFFLER M-300 FOR 60	11.98	10.80
ENY16310	ENYA MUFFLER 300X FOR .60XF	14.75	13.25

SUPERTIGRE



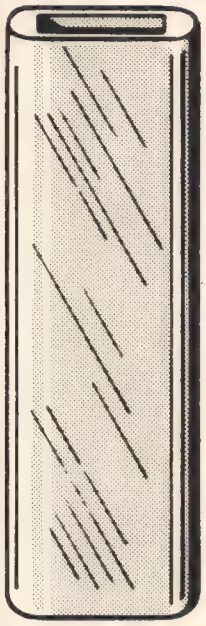
STG16023	SUPERTIGRE MUFFLER FOR 15-23	12.95	11.95
STG16035	SUPERTIGRE MUFFLER FOR 35	12.95	11.95
STG16060	SUPERTIGRE MUFFLER FOR G60-71	12.95	11.95
STG16460	SUPERTIGRE MUFFLER FOR .46 RC	12.95	11.95
STG16600	SUPERTIGRE MUFFLER FOR ST 60BB	12.95	11.95

DU-BRO

DUB16143	DUBRO 143 MUFF-L-AIR .29-.60	7.95	6.95
DUB16144	DUBRO 144 MUFF-L-AIR .09-.25	5.95	5.45
DUB20213	DUBRO 213 EXHAUST EXTENSN 6''	3.95	3.55
DUB20217	DUBRO 217 BAFFLE SET	2.95	2.65
DUB20146	DUBRO 146 MUFFLER STRAP	1.50	1.40

6" ALUMINUM EXHAUST EXTENSION STOCK

CUSTOM MAKE YOUR OWN MUFFLER EXTENSION



Will fit most engines from .29 to .80 and most mufflers including the Du-Bro Universal Muff-L-Aire. This stock can be cut, drilled, tapped and welded to your own specifications.

only $3.95

Cat. #213

DU-BRO PRODUCTS INC
480 Bonner Road
Wauconda, Illinois
60084 U.S.A.

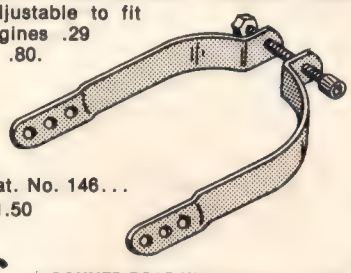
DU-BRO MUFFLER BAFFLE PLATE SET



Complete, replacement Baffle Plates for the Universal Muff-l-aire and can be used in conjunction with our new Exhaust Extension Stock. Cat. No. 217... only $2.95

STEEL MUFFLER STRAPS

These steel, never break, muffler straps can be used with the Du-bro Muff-l-aire and our new Exhaust Extension Stock. Adjustable to fit engines .29 to .80.



Cat. No. 146...
$1.50

DU·BRO PRODUCTS INC 480 BONNER ROAD WAUCONDA, ILL. 60084

MUFF-L-AIRE

IDEAL FOR PLANES, BOATS AND CARS.

- *EXTREMELY COMPACT!*
- *FULLY ADJUSTABLE NOISE LEVEL AND BACK PRESSURE FOR BETTER PERFORMANCE!*
- *ADAPTS TO ALL ENGINES FROM .29 TO .60*



ONLY $7.95 No. 143

UNIVERSAL MUFFLER

Designed for installation on a wide variety of engines from .29 to .60 class. Varying the number of baffle plates controls noise level and back pressure to your desire.

New .045 steel muffler straps are guaranteed not to break.

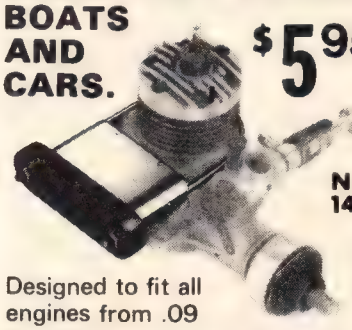
FINE MODEL PRODUCTS BY DU-BRO

DU-BRO PRODUCTS INCORPORATED
480 Bonner Road Wauconda, Illinois 60084 U.S.A.

MINI-MUFF-L-AIRE

IDEAL FOR PLANES, BOATS AND CARS.

$5.95



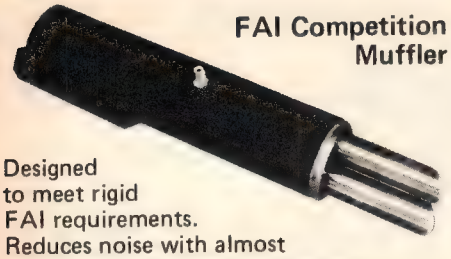
No. 144

Designed to fit all engines from .09 to .25, Varying the number of baffle plates controls noise level and back pressure to your desire. Fully adjustable and extremely compact.

FINE MODEL PRODUCTS BY DU-BRO

designed and manufactured by DU·BRO PRODUCTS INCORPORATED

ENGINE MUFFLERS



FAI Competition Muffler

Designed to meet rigid FAI requirements. Reduces noise with almost no detectable power loss. Contest proven at Nats and Internats. Two sizes — medium — .29 to .40 engines & large for .45 to .80 engines.

Medium 202FA; Large 203 FA

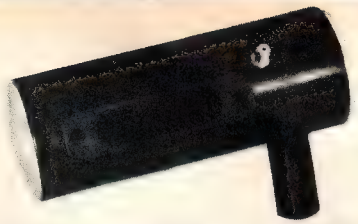
SEMCO



SUPER FLO THRU

Hours of research, development and testing resulted in this sophisticated super muffler which will reduce noise levels without power loss. The elegant design features a black, anodized body for maximum heat dissipation and polished end caps and exhaust tube. Pressure fitting included.

Small 201FS; Medium 202FS; Large 203FS



SUPER EXPANSION

Combining the best of two worlds, this muffler quiets noise effectively with a minimum of power loss. Black anodized with exhaust tube pointed downward to keep exhaust off plane. Pressure fitting included.

Small 201ES; Medium 202ES; Large 203ES

Adaptors



All of our adaptor-type mufflers use one of these individually machined parts to obtain a precise fit around the exhaust stack of your particular engine. We have adaptors to suit virtually every engine and special adaptors can be made on request. The adaptors come in three sizes: small, medium and large to correspond with their respective muffler size. All adaptors bolt directly to muffler for a positive, neat attachment.

Bolt-On

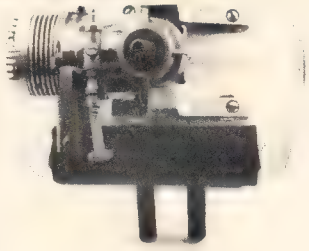
Super expansion, regular expansion, super flo thru, and regular flo-thru bolt-on mufflers are available for the following engine Webra 61

Boat & Scale Top Exhaust



The perfect set up for boat car or scale airplane uses standard Semco adaptors. Features top exhaust and pressure fittings. Available in the following sizes:

Stock No.	Engine Size
201BCT	Small .15 thru .25
202BCT	Medium .29 thru .40
203BCT	Large .45 thru .80



Pitts Muffler

Designed especially for aircraft such as Midwest's Pitts Special, this Semco expansion muffler fits neatly inside cowl and has two angled exhaust outlets for maximum scale effect. The black anodized muffler has a low back pressure design, yet is very quiet in operation.

The Pitts muffler (203P) comes in a smaller version known as Pitts Jr. mufflers (202PJ medium and 203 PJ Large) that are perfect for planes such as Stafford Acrosport, Sig Liberty Sport, Sig Skybolt and others.

TUNED PIPE

Just announced is a new tuned pipe (203T) that will work with the tuned pipe adaptor shown on this page. No picture available at press time.

Tuned Pipe Adaptor



At last! A tuned pipe adaptor that will fit any engine to any tuned pipe (with standard Semco adaptors). Production run in black anodized aluminum for maximum heat dissipation.

Medium 202TPA; Large 203 TPA

Exhaust Restrictor Plugs
Available in two sizes.



Small 310P; Large 311P

FOR ALL SEMCO:
Small fits .15-.25
Medium fits .20-.40
Large fits .45-.80

EXHAUST EXTENSIONS



Perfect for scale and pylon racers where muffler is not required. Complete with mounting strap and universal locating slot. Available in three sizes:



Muffler Extensions
(complete with mounting strap)
Use with **Semco** or other mufflers. Available in

Small 401—½ and 1"
Medium 402—½ and 1"
Large 403—½ and 1"

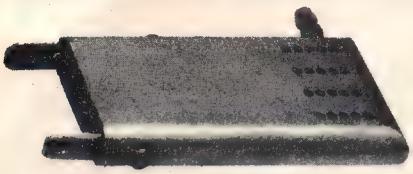


Replacement Muffler Straps
Direct replacement for **Semco** muffler can also be used with other brand mufflers. Available in three sizes.

Medium 202RS
Large 203RS

SEM16000	SEMCO BOLTON FT WEBRA 61 203SW	15.95	12.30
SEM16030	SEMCO BOLTON EX WEBRA 61 203EW	15.95	12.30
SEM16120	SEMCO MUFFLER #201-FS	13.95	10.75
SEM16121	SEMCO MUFFLER #202-FS	13.95	10.75
SEM16122	SEMCO MUFFLER #203-FS	13.95	10.75
SEM16161	SEMCO MUFFLER #201-ES	13.95	10.75
SEM16162	SEMCO MUFFLER #202-ES	13.95	10.75
SEM16163	SEMCO MUFFLER #203-ES	13.95	10.75
SEM16181	SEMCO MUFFLER #201-BCT	13.95	10.75
SEM16182	SEMCO MUFFLER #202-BCT	13.95	10.75
SEM16183	SEMCO MUFFLER #203-BCT	13.95	10.75
SEM16185	SEMCO MUFFLER #202-FA	13.95	10.75
SEM16186	SEMCO MUFFLER #203-FA	13.95	10.75
SEM16188	SEMCO MUFFLER #203T TUNED PIPE	13.95	10.75
SEM16191	SEMCO MUFFLER FOR PITTS #203P	13.95	10.75
SEM16192	SEMCO MUFFLER PITTS JR #202PJ	13.95	10.75
SEM16193	SEMCO MUFFLER PITTS JR #203PJ	13.95	10.75
SEM16201	SEMCO ADAPTOR #1-S ENYA 15-19	2.98	2.50
SEM16206	SEMCO ADAPTOR #6-S VECO 19	2.98	2.50
SEM16208	SEMCO ADAPTOR #8-S FOX 19-25	2.98	2.50
SEM16301	SEMCO ADAPTOR #1-M ENYA 29-35	2.98	2.50
SEM16302	SEMCO ADAPTOR #2-M OS 30-35-40	2.98	2.50
SEM16303	SEMCO ADAPTOR #3-M ST 29-35	2.98	2.50
SEM16304	SEMCO ADAPTOR #4-M K&B 35-40	2.98	2.50
SEM16305	SEMCO ADAPTOR #5-M FOX 29-36	2.98	2.50
SEM16307	SEMCO ADAPTOR #7-M OLD K&B 35	2.98	2.50
SEM16309	SEMCO ADAPTOR #9-M WEBRA 40	2.98	2.50
SEM16316	SEMCO ADAPTOR #16-M OS 40 SCHN	2.98	2.50
SEM16317	SEMCO ADAPTOR #17-M FOX 40 SHN	2.98	2.50
SEM16318	SEMCO ADAPTOR #18-M WEB 40 SPD	2.98	2.50
SEM16401	SEMCO ADAPTOR #1-L ENYA 40-45	2.98	2.50
SEM16402	SEMCO ADAPTOR #2-L ENYA 60 III	2.98	2.50
SEM16404	SEMCO ADAPTOR #4-L OS 60	2.98	2.50
SEM16405	SEMCO ADAPTOR #5-L ST 46	2.98	2.50
SEM16406	SEMCO ADAPTOR #6-L ST 51-56-60	2.98	2.50
SEM16409	SEMCO ADAPTOR #9-L FOX 78	2.98	2.50
SEM16413	SEMCO ADAPTOR #13-L WEBRA 61	2.98	2.50
SEM16417	SEMCO ADAPTOR #17-L ST G60-71	2.98	2.50
SEM16419	SEMCO ADAPTOR #19-L FOX 60	2.98	2.50
SEM16421	SEMCO ADAPTOR #21-L WEB 61 SNL	2.98	2.50
SEM16426	SEMCO ADAPTOR #26-L FOX 45 SHN	2.98	2.50
SEM16427	SEMCO ADAPTOR #27-L OS 60 SCHN	2.98	2.50
SEM16428	SEMCO ADAPTOR #28-L KRAFT 61	2.98	2.50
SEM16485	SEMCO TUNED PIPE ADPTOR 202TPA	8.95	7.60
SEM16486	SEMCO TUNED PIPE ADPTOR 203TPA	8.95	7.60
SEM16494	SEMCO TUNED PIPE COUPLER TPC	4.98	4.20
SEM16502	SEMCO REPLACEMENT STRAP #202RS	1.89	1.80
SEM16503	SEMCO REPLACEMENT STRAP #203RS	1.98	1.90
SEM16510	SEMCO EXHAUST PLUGS #310P	.98	.95
SEM16511	SEMCO EXHAUST PLUGS #311P	.98	.95
SEM16520	SEMCO 401-1EXT 1 IN MUFF EXTN	4.25	3.85
SEM16521	SEMCO 401EXT 1/2 IN MUFF EXTN	3.95	3.55
SEM16522	SEMCO 402EXT 1/2 IN MUFF EXTN	3.95	3.55
SEM16523	SEMCO 402-1EXT 1 IN MUFF EXTN	4.25	3.85
SEM16524	SEMCO 403EXT 1/2 IN MUFF EXTN	3.95	3.55
SEM16525	SEMCO 403-1EXT 1 IN MUFF EXTN	4.25	3.85
SEM16531	SEMCO EXHAUST EXTENSION #201EM	4.50	4.25
SEM16532	SEMCO EXHAUST EXTENSION #202EM	4.50	4.25
SEM16533	SEMCO EXHAUST EXTENSION #203EM	4.50	4.25

SLIM LINE MUFFLERS are designed for minimum air drag and power loss. Precision machined from bar stock aluminum to fit individual engines. Mounting hardware included with all four styles.



SLIM LINE

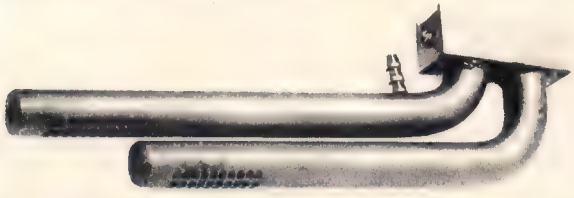
Standard mufflers are 2½" long. Tangs provide constant positive positioning. Available for most engines .15 thru .80 sizes.



Competition Flag mufflers meet F.A.I. sound specifications; a natural for sport flyers. Available for engines .29 thru .80 sizes.



Sport Scale I mufflers are designed for cowled ships. 6" long tubes can be cut to match bottom of cowl or copper tubing can be added to extend exhaust where desired. Available for engines .29 thru .80 sizes.

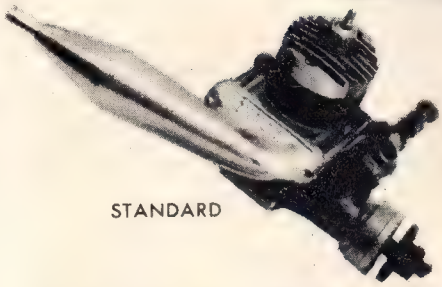


Sport Scale II mufflers, designed for in-line exhaust planes, have many scale applications as well as sport flying. Available for engines .29 thru .80 sizes.

SLM16001	SLM STD. MUFF 1001 ALL 60-80	12.95	11.65
SLM16002	SLM STD. MUFF 1002 ALL 29-45	12.95	11.65
SLM16003	SLM SCALE 1 MUF 1003 ALL 60-80	13.95	12.55
SLM16004	SLM SCALE 1 MUF 1004 ALL 29-45	13.95	12.55
SLM16005	SLM SCALE 2 MUF 1005 ALL 60-80	13.95	12.55
SLM16006	SLM SCALE 2 MUF 1006 ALL 29-45	13.95	12.55
SLM16100	SLM STD MUFF 702 HP 40	8.95	8.10
SLM16110	SLM STD MUFF 701 HP 60	9.95	8.95
SLM16111	SLM COMP MUFF 703 HP 60	12.95	11.65
SLM16200	SLM STD MUFF 404 WEB 40 SCHNRL	8.95	8.10
SLM16205	SLM STD MUFF 402 WEB 40 BLKHD	8.95	8.10
SLM16210	SLM STD MUFF 301 WEB/K&B 61	9.95	8.95
SLM16211	SLM COMP MUFF 105 WEB/K&B 61	12.95	11.65
SLM16220	SLM STD MUFF 403 WEB 61 SCHNRL	9.95	8.95
SLM16300	SLM STD MUFF 101 ST 60 BLUEHD	9.95	8.95
SLM16301	SLM COMP MUFF 104 ST 60 BLUEHD	12.95	11.65
SLM16305	SLM STD MUFF 103 ST 15,23	7.95	7.25
SLM16310	SLM STD MUFF 102 ST 60SR,46	9.95	8.95
SLM16311	SLM COMP MUFF 105 ST 60SR,46	12.95	11.65
SLM16390	SLM STD MUFF 303 VECO 19	7.95	7.25
SLM16400	SLM STD MUFF 302 K&B 35,40	8.95	8.10
SLM16410	SLM STD MUFF 301 K&B/WEB 61	9.95	8.95
SLM16411	SLM COMP MUFF 105 K&B/WEB 61	12.95	11.65
SLM16495	SLM STD MUFF 204 OS MAX 15-25	7.95	7.25
SLM16500	SLM STD MUFF 202 OS MAX 30-40	8.95	8.10
SLM16503	SLM STD MUFF 203 OS MAX 40 FSR	8.95	8.10
SLM16510	SLM STD MUFF 201 OS MAX 60-80	9.95	8.95
SLM16580	SLM STD MUFF 503 ENYA 15-19	7.95	7.25
SLM16600	SLM STD MUFF 502 ENYA 29-45	8.95	8.10
SLM16610	SLM STD MUFF 501 ENYA 60	9.95	8.95
SLM16690	SLM STD MUFF 804 FOX 19-35	8.95	8.10
SLM16700	SLM STD MUFF 803 FOX 40&45 SCH	8.95	8.10
SLM16710	SLM STD MUFF 802 FOX 60	9.95	8.95
SLM16715	SLM STD MUFF 801 FOX 78	9.95	8.95
SLM16770	SLM STD MUFF 601 KRAFT 61 SCHN	9.95	8.95
SLM16771	SLM COMP MUFF 602 KRAFT 61 SCH	12.95	11.65

TATONE

World Famous
"PEACE PIPE" MUFFLERS



STANDARD

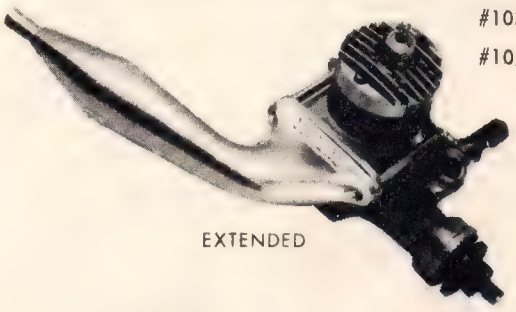
STANDARD

#101 (.09-.19)
#102 (.29-.40)
#103 (.45-.80)

The "PEACE PIPE" mufflers are made in three sizes and are designed to fit 98% of all available engines without any modifications. One muffler can be interchanged with many engines. Easy to attach and angled to keep the fuselage cleaner. Streamline, flow out design is prefered by many leading experts.

EXTENDED

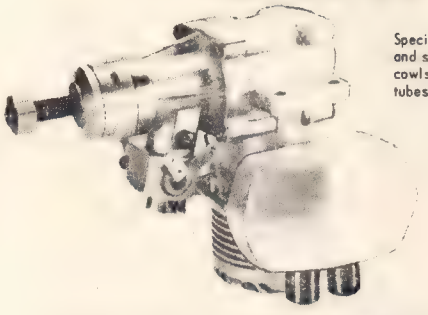
#101L (.09-.19)
#102L (.29-.40)
#103L (.45-.80)



EXTENDED

This new "PEACE PIPE" was extended to provide 1" of clearance between the exhaust stack and and muffler.Designed to fit most wide fuselages and cowlings, an all time favorite.

INVERTED MANIFOLD



Specially designed for Sig's Ryan STA and similiar type models using tight cowls and inverted engines. Twin exhaust tubes exit to botton of cowling.

Includes manifold, two lengths of special rubber exhaust tubing, two types of mounting straps and hardened stainless steel screws.

Fits any .45-.80 size engines.

The inverted manifold is available in two configurations:
EM-S: inverted engine, exhaust tubes pointing down
EM-SS: inverted engine, side exhaust tubes

TAT16101	TATONE #101 PEACE PIPE 09-19	8.45	7.60
TAT16102	TATONE #102 PEACE PIPE 29-40	7.65	6.70
TAT16103	TATONE #103 PEACE PIPE 45-80	10.85	9.75
TAT16201	TATONE #101L PEACE PIPE 09-19	8.80	7.90
TAT16202	TATONE #102L PEACE PIPE 29-40	10.25	9.20
TAT16203	TATONE #103L PEACE PIPE 45-80	11.05	9.95
TAT16401	TATONE INVERTED MANIFOLD #EM-S	10.65	9.60
TAT16402	TATONE INVERTED MAINFOLD EM-SS	10.65	9.60

WEBRA



WEB09000	WEBRA TUNED PIPE #1100/7 61WR	56.85	39.80
WEB13091	WEBRA MUFFLER FOR .91	61.55	42.95
WEB13739	WEBRA 1024 EXP MUFF #1100/6EG	14.95	12.50
WEB13759	WEBRA 1024 FT MUFF #1100/6ER	25.00	20.75

Fuel Pumps and Tanks

The fuel tank is often underrated when it is being chosen for a plane. This is amazing, especially since it is critical to the proper performance of the engine. There is a proper size and position of tank for each different engine. The tank commonly used for each engine is defined as a size, only. The shape is really not critical, unless restrictions of the airplane require a special tank shape. What is important is the fact that the tank is neither too large nor too small for the engine.

The recommended tank sizes are:
.049: 1 or 2 ounces.
.09-.15: 2-4 ounces.
.19-.25: 4 ounces.
.29-.35: 6-8 ounces.
.40-.45: 8-10 ounces.
.60: 12-16 ounces
Larger than .60: as large as you can fit into your plane.

The tank sizes listed are those that have been used with most planes and engines, and do work. Some installations may not allow for as large a tank as you would like, so you would have to use what will fit.

Generally, you can tell if the tank is too large if the engine tends to lean out excessively when it starts to run through the latter part of the fuel load . . . provided the tank is located properly. A too-small tank will generally give you a shorter engine run than you would normally expect from that size engine.

The location of the fuel tank is critical, also . . . unless you are using an on-board fuel pump. You can tell that the tank is located properly when it is located as close to the engine as possible, and the centerline of the tank passes through the center of the carburetor, or no more than ½" below the center of the carburetor.

Lately, we have seen the development of efficient fuel pumps that allow you to place the fuel tank anywhere you desire in the plane, yet they still allow the engine to draw the fuel it requires for efficient running. The Perry pumps are bolted directly to the crankcase, and used the pulsating pressure in the crankcase to drive a diaphragm pump. This pump is quite powerful and requires that the Perry pressure carburetor is used with it. It cannot be used with a regular carb. See below for details.

The Robart pumps are in-line pumps, and use pressure taken from the crankcase via a tap. This pump can be used with a regular carburetor, and can be adjusted to work with almost any carb.

The other types of fuel pumps we carry are designed for fueling the plane from the can of fuel carried on the field box. These pumps can be either manual or electric.

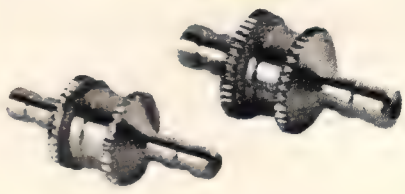
AEROTREND



Aerotrend "Blue Line" tubing is thick, strong, extremely flexible, and highly heat resistant. It comes in 3 foot packages in 4 different sizes. Inside diameter sizes are: Small 5/64", Medium 3/32", Large 1/8", and Extra Large is 5/32". This is very high quality fuel tubing—try it once and you'll never use any other kind.

AER55100	AEROTREND TUBING 3 FT.-SMALL	1.89	1.80
AER55110	AEROTREND TUBING 3 FT.-MEDIUM	1.89	1.80
AER55120	AEROTREND TUBING 3 FT.-LARGE	1.89	1.80
AER55130	AEROTREND TUBING 3 FT.-X-LARGE	1.89	1.80

FOX



FOX FUEL FILTERS

For dependable tank after tank engine runs our two piece fuel filters have a fine mesh screen to collect solid particles. Disassemble for easy cleaning.

LARGE NO. 90702

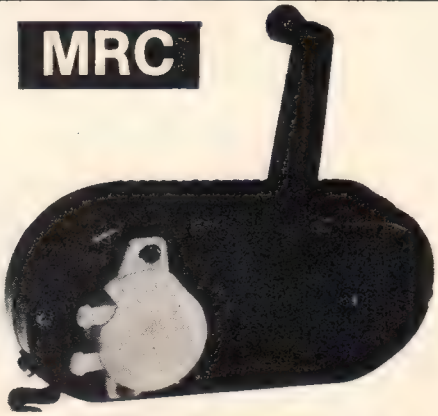
SMALL NO. 90701

FOX52701	FOX #90701 SMALL FUEL FILTER	1.25	1.20
FOX52702	FOX #90702 LARGE FUEL FILTER	1.25	1.20

FUEL PUMP

MRC

- High impact fuel resistant gear box
- Pump head adjusts for smooth operation
- Knob is free to rotate for effortless cranking
- Clip for convenient mounting on side of fuel can
- Raised ribs on case for non-slip grip

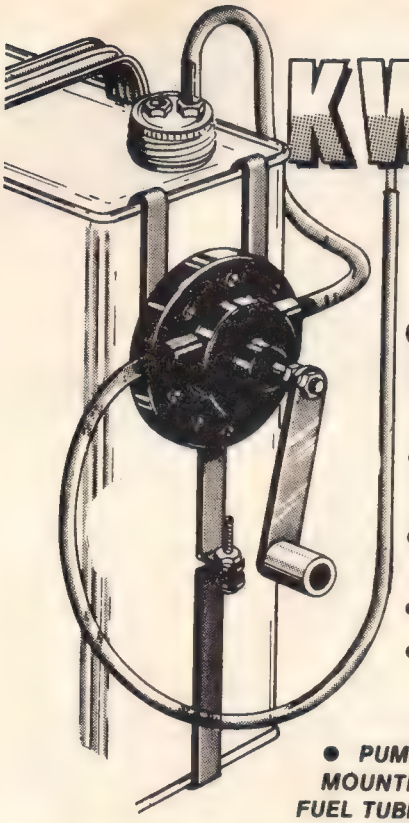


MRC54011	MRC MECHANICAL HAND FUEL PUMP	11.50	9.20

CALL TOWER TOLL FREE FOR AVAILABILITY AND PRICE INFORMATION ON NEW ITEMS NOT IN THIS CATALOG.

TOWER HOBBIES

DU-BRO



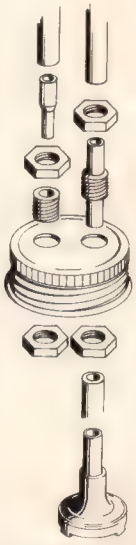
KWIK-FILL FUEL PUMP

A NEW CONCEPT IN FUEL PUMPS — ONLY ONE MOVING PART . . NOTHING TO BREAK OR WEAR OUT.

- *LIGHT, COMPACT AND RUGGED. ONLY 2" WIDE AND 2-7/8" IN DIA.*
- *HAND OPERATED AND REVERSIBLE — PUMPS IN AND OUT.*
- *HIGH VOLUME FLOW.*
- *PUMP COMES ASSEMBLED AND MOUNTS ON GALLON CANS. QUICK, EASY INSTALLATION.*
- *PUMP COMES COMPLETE WITH STEEL MOUNTING BRACKETS, HARDWARE AND FUEL TUBING.*

No. 191

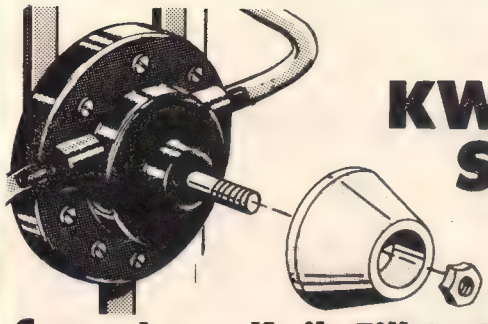
FUEL CAN CAP FITTINGS



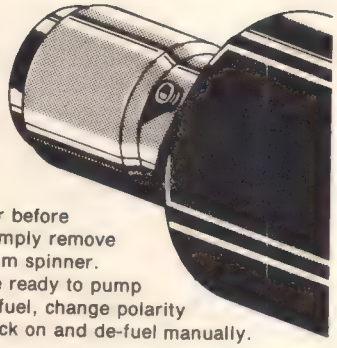
FOR QUICK AND EASY FUEL PUMP HOOK-UPS

NO. 192

Universal cap fittings and new nylon filter for any standard 1-1/4", or larger, fuel can cap. 8 piece set includes 4, 1/4" nuts, 3 top quality brass fittings and fuel filter. Accepts large size fuel tubing.



DU-BRO KWIK-PUMP SPINNER



Convert your Kwik-Fill Fuel Pump to Electric Starter Operation

cat. no. 211

Pump fuel faster and easier than ever before with the new Kwik-Pump spinner. Simply remove the handle and screw on the aluminum spinner. Lock it in place with a nut and you're ready to pump fuel with your electric starter. To de-fuel, change polarity to your starter or wind the handle back on and de-fuel manually. It's as easy as that!!



TANK FILTER

Combination weight and filter. Designed to fit all clunk tanks. Made of sintered bronze to give the ultimate in filtering.

No. 161 .

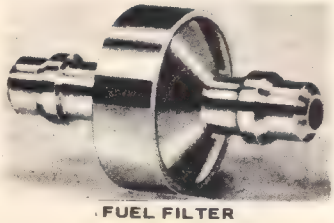
FINE MODEL PRODUCTS BY DU-BRO

DUB20161	DUBRO 161 R/C TANK FILTER	1.15	1.10
DUB20191	DUBRO 191 KWIK FILL FUEL PUMP	10.95	7.95
DUB20192	DUBRO 192 FUEL CAN FITTINGS	1.75	1.65
DUB20211	DUBRO 211 KWIK-PUMP SPINNER	2.95	2.80

PERRY

High quality polypropylene filter in aluminum housing is sealed in to prevent leakage. Will not corrode. Prevents any foreign matter in fuel from entering carburetor. Protects engine.

#PER52100



FUEL FILTER

PER52100	PERRY FUEL FILTER	.95	.85

ROCKET CITY

30 FOOT SPOOL SILICONE FUEL TUBING

Will not harden or deteriorate. 3/32" inside diameter tubing for .19 size engines and larger. Good value!

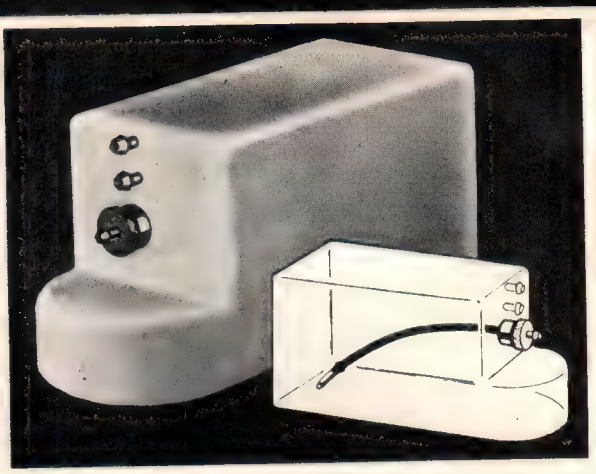
RCS55049	ROCKET CITY #49 TUBE SILI 30FT	15.00	12.75

FUEL PUMPS, TANKS, FILTERS, ETC.

THE FINEST TANKS FOR RADIO CONTROL ARE NOW IN PRODUCTION ON OUR OWN BLOW MOLDING MACHINES AND ARE READILY AVAILABLE.

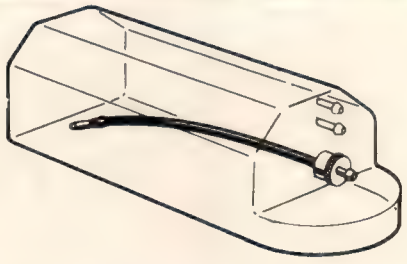
- **EXCLUSIVELY DESIGNED FOR RADIO CONTROL**
- **PROTRUDING FRONT ELIMINATES PINCHED LINES**
- **EASILY REMOVABLE PICKUP TUBE**
- **NON-SLIP NIPPLES**
- **WON'T SPLIT • WON'T LEAK**

CAPACITY	OUTSIDE DIMENSIONS			PART NO.
	HEIGHT	WIDTH	LENGTH	
4-ounce	1.875	1.625	3.456	200-084
6-ounce	2.062	1.687	4.406	200-071
8-ounce	2.250	1.875	4.681	200-070
11-ounce	2.375	2.000	4.875	200-026
13-ounce	2.625	2.250	5.125	200-027



CAPACITY	OUTSIDE DIMENSIONS			PART NO.
	HEIGHT	WIDTH	LENGTH	
4-ounce	1.580	1.750	3.800	200-148
8-ounce	1.875	2.250	4.420	200-147
12-ounce	2.073	2.375	6.504	200-085
16-ounce	2.850	2.750	5.400	200-146

KRAFT



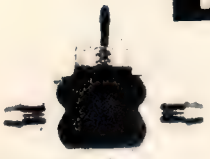
For maximum engine reliability a fuel filter is essential. It prevents contaminates from clogging the carburetor needle valve assembly.
Part No. 200-028



- **SPECIFICALLY DESIGNED TO BE INSTALLED ABOVE RETRACTABLE LANDING GEAR**
- **SAME EXCELLENT FEATURES AS OUR OTHER TANKS**

KRA52028	KRAFT 200-028 FUEL FILTER	1.29	1.25
KRA53004	KRAFT 200-084 FUEL TANK 4 OZ	2.69	2.55
KRA53006	KRAFT 200-071 FUEL TANK 6 OZ	2.89	2.75
KRA53008	KRAFT 200-070 FUEL TANK 8 OZ	2.89	2.75
KRA53011	KRAFT 200-026 FUEL TANK 11 OZ	3.19	3.05
KRA53013	KRAFT 200-027 FUEL TANK 13 OZ	3.19	3.05
KRA53104	KRAFT 200-148 SLIM TANK 4 OZ	2.69	2.55
KRA53108	KRAFT 200-147 SLIM TANK 8 OZ	2.89	2.75
KRA53112	KRAFT 200-085 SLIM TANK 12 OZ	3.19	3.05
KRA53116	KRAFT 200-146 SLIM TANK 16 OZ	3.69	3.50

ROBART



1/2A Super Pumper
For use on .020 thru .15 engines



Mark II Super Pumper
New smaller size standard pump

Super PumperS

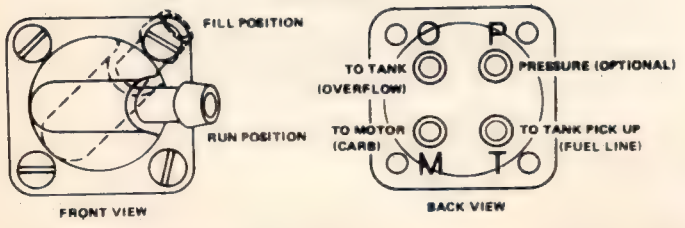
PAT PEND

THE ROBART SUPER PUMPER PROVIDES THREE BASIC ADVANTAGES FOR THE R/C MODEL AIRPLANE, BOAT AND CAR ENGINES: (1) MORE UNIFORM ENGINE RUN, INDEPENDENT OF FUEL TANK POSITION OR FUEL REMAINING. (2) THE ABILITY TO REMOTELY LOCATE FUEL TANK (i.e., IN THE WING, ON THE CENTER OF GRAVITY, TWIN ENGINES WITH SINGLE FUEL TANK). (3) THE ABILITY TO UTILIZE LARGER CARBURETOR VENTURI FOR MORE POWER. SINCE FUEL DRAW PROBLEMS ARE ELIMINATED, THE VENTURI CAN BE ENLARGED TO MEET THE MAXIMUM POTENTIAL OF THE LOOP SCAVENGED TWO CYCLE MODEL ENGINE. FUEL CONSUMPTION WILL NOT CHANGE UNLESS LARGER VENTURI CARBURETOR IS USED. THE SUPER PUMPER IS CONSTRUCTED OF SPACE AGE MATERIALS COMPRISING A DIAPHRAM, TWO SERIES CHECK VALVES, AND A LIMIT REGULATOR. THE METERED PRESSURE FITTING HAS A SPECIAL SIZE HOLE AND MUST BE USED IN CONJUNCTION WITH THE SUPER PUMPER. THE FITTING IS ALSO AVAILABLE SEPARATELY SO YOUR SUPER PUMPER CAN BE USED WITH SEVERAL ENGINES.

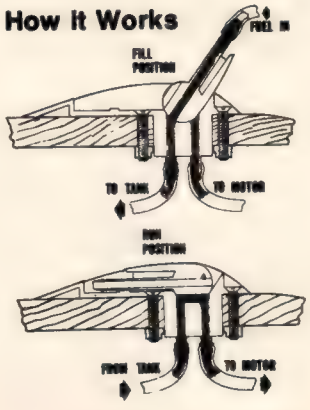
NEW **Ultra Fueler**

Another Robart Exclusive

- EXTERNAL FILL FUNCITON
- OVERFLOW INDICATION OVERBOARD
- 4 VALVES—FOR BOTH FUEL LINE AND VENT / PRESSURE LINE
- REPLACEABLE 'O' RING SEALS
- SMALL SIZE
- EXCELLENT PYLON, PATTERN OR DUCTED FAN FILLER—SHUT—OFF—PRESSURE SWITCH



How It Works



SUPER FUELER #ROB50000



Super Fueler automatically connects your fuel source to the fuel tank for refueling, then re-connects the tank to the engine. All this is done without pulling the fuel line off the engine. To stop your engine with a dry crankcase simply open the Super Fueler,. Use an extra Super Fueler on a pylon ship to cut off pressure during start. Super Fueler is ideal for tightly cowled engines where fueling access is difficult.

ROB50000	ROBART SUPER FUELER	1.98	1.90
ROB51000	ROBART ULTRA FUELER	3.98	3.60
ROB54000	ROBART SUPER PUMPER MARK II	17.95	14.35
ROB54100	ROBART 1/2 A SUPER PUMPER	15.95	12.75

SOUTHERN R/C



SIX-SHOOTER

An industrial quality hand operated rotary pump designed especially for model use, has no seals or valves to leak or wear out. It is self-priming and will stop and reverse flow almost instantly. Pumps six-tenths of an ounce per turn. Twenty turns, twenty seconds and your twelve ounce tank is full. Almost indestructable and guaranteed for one year!

LIFELINE

The fuel tubing you've always wanted. Perfect for external tank connections whether pressure or crankcase feed--actually "grows" to metal tubing. It's name is no accident as it is extremely hole and split resistant and guaranteed for a lifetime against adverse fuel effects.

4 ft. package

SRC54401	SOUTHERN RC SIX-SHOOTER PUMP	10.95	8.95
SRC55501	SOUTHERN RC LIFELINE 4 FT.	2.50	2.25

SONIC-TRONICS

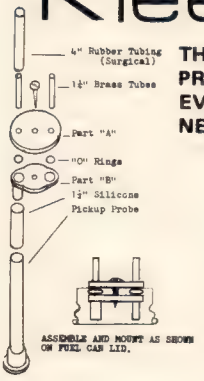


Introducing the most advanced design electric fuel pump ever available . . . The combination of a new high performance motor and new molded pump unit will fill the largest of fuel tanks quickly, and requires less than half the input current of other electric fuel pumps. Many new features, including recessed fuel outlets, internal printed circuit board for solid control switch functions, plus nylon molded case.

Available in two models:
—No. 250, 2 to 6 volt operation
—No. 1250, 7.5 to 12 volt operation

STR54249	SONICTRNCS #1250 12V FUEL PUMP	14.95	11.95
STR54250	SONICTRONICS #250 FUEL PUMP	14.95	11.95
STR54251	SONICTRONICS #250R RESISTOR	1.95	1.75
STR54252	SONICTRONICS #252 BIG SHOT 8OZ	3.29	2.95
STR54253	SONICTRONICS #253 KLEEN-FIL	1.85	1.65
STR55220	SONICTRONICS #220 SURGICAL SM.	.65	.60
STR55221	SONICTRONICS #221 SURGICAL LG.	.75	.70
STR55222	SONICTRONICS #222 SURGICAL SUP	.85	.80
STR55225	SONICTRONICS #225 SILICONE SM.	.80	.75
STR55226	SONICTRONICS #226 SILICONE LG.	.90	.85
STR55251	SONICTRONICS #251 FUELLINE KIT	1.79	1.60
STR55326	SONICTRONICS #226R 30 ROLL LG	11.50	10.25

Kleen-Fil



THE FILTERED FUEL PROBE ASSEMBLY — EVERY FUEL CAN NEEDS IT!

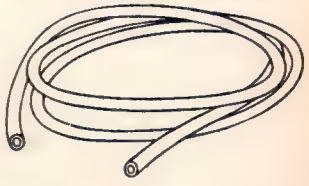
Kleen-Fil keeps dirt out of your fuel and the can stays closed at all times to prevent evaporation and spilling.



BIG SHOT FUEL BULB

The bulb may be used as shown or mounted to any pint, quart, or gallon fuel can lid with the adapter included. Holds 8 oz. No. 252.

Fuel Line



Surgical Fuel Line

Small, 2 ft. per pkg.	No. 220
Large, 2 ft. per pkg.	No. 221
Super, 2 ft. per pkg.	No. 222

Silicone Fuel Line

Small, 2 ft. per pkg.	No. 225
Large, 2 ft. per pkg.	No. 226
Special, for FF Timer Fuel cut off, 2 ft. per pkg	No. 227
30 ft. roll, small	No. 225R
30 ft. roll, large	No. 226R

Special Silicone Fuel Line Kit

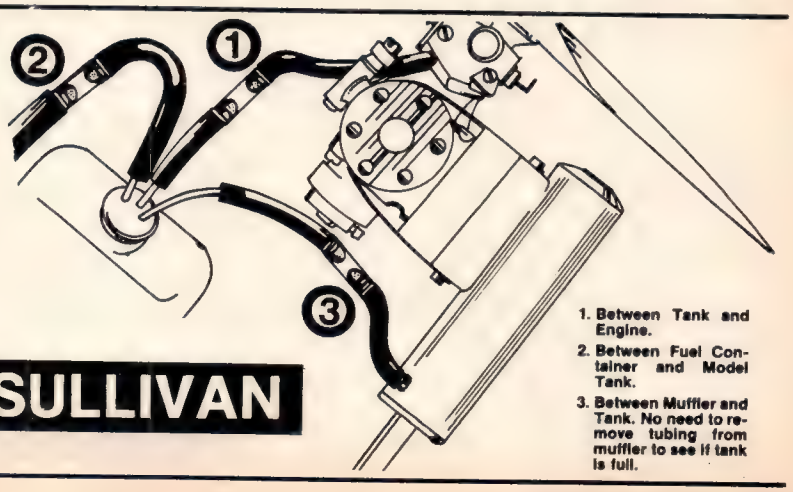
3 ft. of 5/32" ID Tubing & probe	No. 251

Newer, more sophisticated carburetors and pumps are very sensitive to fine particles that can get through most filters. But not the Crap Trap. Here's why:

- **DOUBLE FILTRATION—Includes two separate filters, a 100 mesh (.007 opening) and a 120 mesh (.004 opening).**
- **MORE FILTER AREA—Both filters are cup-shaped to greatly increase filter capacity.**
- **COLOR CODED—Fuel must go through larger (silver) mesh first to filter out larger particles and then through the smaller (bronze) mesh. This is a must.**
- **WATCH IT WORK—Filters are encased in see-through tubing.**
- **CAN TAKE THE HEAT—The extruded Teflon casing can handle temperatures up to 600° F.**

SUL52100	SULLIVAN CT-1 CRAP TRAP FILTER	1.00	.95

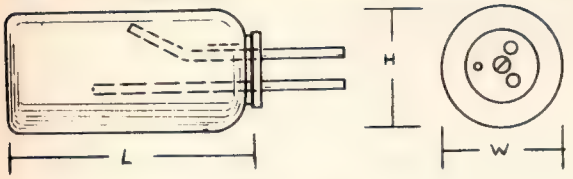
SULLIVAN



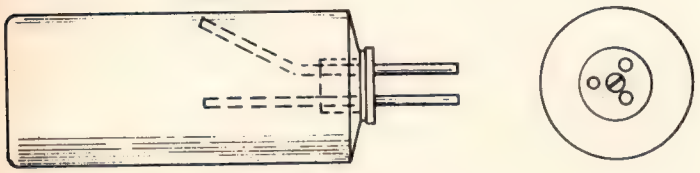
1. Between Tank and Engine.
2. Between Fuel Container and Model Tank.
3. Between Muffler and Tank. No need to remove tubing from muffler to see if tank is full.

SULLIVAN

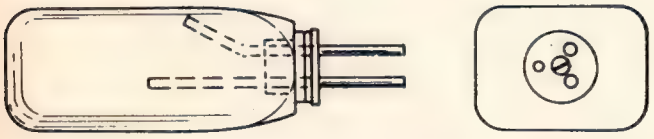
ROUND TYPE



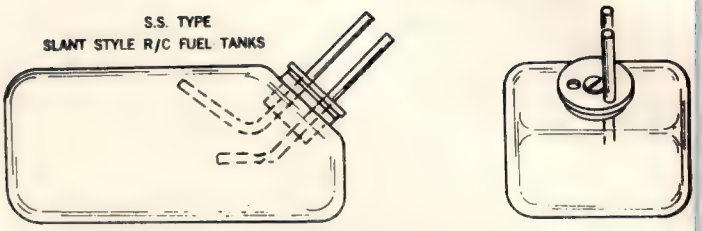
CYLINDER TYPE



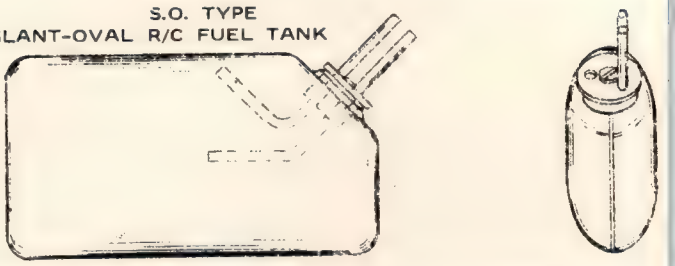
RST TYPE
SPECIAL SHAPE; ROUND, SQUARE, TAPERED TANK



S.S. TYPE
SLANT STYLE R/C FUEL TANKS



S.O. TYPE
SLANT-OVAL R/C FUEL TANK



NEV-R-LEAK FUEL TANKS (STANDARD)

Round Type

R-1	1 oz. – 1-1/4" O.D. x 2-1/8" Long
R-2	2 oz. – 1-3/8" O.D. x 2-3/4" Long
R-4	4 oz. – 1-3/4" O.D. x 3-5/8" Long
R-6	6 oz. – 2" O.D. x 4" Long
R-8	8 oz. – 2-5/16" O.D. x 4-3/16" Long
R-10	10 oz. – 2-5/16" O.D. x 4-7/8" Long
R-12	12 oz. – 1-1/2" O.D. x 5-1/2" Long
R-16	16 oz. – 3" O.D. x 4-3/4" Long

RST TYPE (SPECIAL SHAPE)

RST 4	4 oz. – 1-3/8"H x 2"W x 3-1/2" Lg.
RST 6	6 oz. – 1-3/4"H x 2-1/8"W x 4" Lg.
RST 8	8 oz. – 1-7/8"H x 2-1/4"W x 4-1/2" Lg.
RST 10	10 oz. – 2-1/8"H x 2-1/2"W x 4-3/8" Lg.
RST 12	12 oz. – 2-1/8"H x 2-1/2"W x 5" Lg.

SLANT TYPE

SS-2	1 oz. – 1-1/8"H x 1-3/8"W x 2-1/2" Lg.
SS-3	2 oz. – 1-1/4"H x 1-3/4"W x 2-3/4" Lg.
SS-4	4 oz. – 1-3/8"H x 2"W x 3-1/2" Lg.
SS-6	6 oz. – 1-3/4"H x 2-1/8"W x 4" Lg.
SS-8	8 oz. – 1-7/8"H x 2-1/4"W x 4-1/2" Lg.
SS-10	10 oz. – 2-1/8"H x 2-1/2"W x 4-3/8" Lg.
SS-12	12 oz. – 2-1/8"H x 2-1/2"W x 5" Lg.
SS-14	14 oz. – 2-1/16"H x 2-5/8"W x 5-3/4" L
SS-16	16 oz. – 2-5/16"H x 2-11/16"W x 5-3/4 L

SLANT OVAL TYPE

SO-6	6 oz. – 2-1/2"H x 1-1/2"W x 4-5/8" L
SO-8	8 oz. – 2-3/4"H x 1-1/2"W x 5-11/32"L
SO-10	10 oz. – 3"H x 1-1/2"W x 6" L
SO-12	12 oz. – 3-1/4"H x 1-1/2"W x 6-1/2"L

"FUEL CELL" TANKS (W/KLAPPER KLUNK)

Round Type (Fuel-Cell)

CR-4	4 oz. – 1-3/4"O.D. x 3-5/8" Long
CR-6	6 oz. – 2" O.D. x 4" Long
CR-8	8 oz. – 2-5/16"O.D. x 4-3/16" Long
CR-10	10 oz. – 2-5/16"O.D. x 4-7/8" Long
CR-12	12 oz. – 2-1/2" O.D. x 5-1/2" Long

RST TYPE (FUEL-CELL)

CRST 4	4 oz. – 1-3/8"H x 2"W x 3-1/2" Lg.
CRST 6	6 oz. – 1-3/4"H x 2-1/8"W x 4" Lg.
CRST 8	8 oz. – 1-7/8"H x 2-1/4"W x 4-1/2" Lg
CRST 10	10 oz. – 2-1/8"H x 2-1/2"W x 4-3/8" Lg
CRST 12	12 oz. – 2-1/8"H x 2-1/2"W x 5" Lg

SLANT TYPE (FUEL-CELL)

CSS 4	4 oz. – 1-3/8"H x 2"W x 3-1/2" Lg.
CSS 6	6 oz. – 1-3/4"H x 2-1/8"W x 4" Lg.
CSS 8	8 oz. – 1-7/8"H x 2-1/4"W x 4-1/2" Lg.
CSS 10	10 oz. – 2-1/8"H x 2-1/2"W x 4-3/8"Lg
CSS 12	12 oz. – 2-1/8"H x 2-1/2"W x 5" Lg.

The standard tanks (R, RST, SS, SO) come with the tank, complete package of tubes, hoses, fittings, stopper, Klunk, and instructions. The "Fuel Cell" tanks (CR, CRST, CSS) come with everything the standard tanks have plus a special material donut shaped insert that acts as an anti-foam and anti-surge element.

SUL53001	SULLIVAN SS-2 TANK	1.75	1.65
SUL53004	SULLIVAN SS-4 TANK	1.95	1.80
SUL53006	SULLIVAN SS-6 TANK	2.20	2.10
SUL53008	SULLIVAN SS-8 TANK	2.20	2.10
SUL53010	SULLIVAN SS-10 TANK	2.35	2.20
SUL53012	SULLIVAN SS-12 TANK	2.35	2.20
SUL53014	SULLIVAN SS-14 TANK	2.50	2.35
SUL53016	SULLIVAN SS-16 TANK	2.50	2.35
SUL53106	SULLIVAN SO-6 TANK	2.20	2.10
SUL53108	SULLIVAN SO-8 TANK	2.20	2.10
SUL53110	SULLIVAN SO-10 TANK	2.35	2.20
SUL53112	SULLIVAN SO-12 TANK	2.35	2.20
SUL53204	SULLIVAN CR-4 TANK	1.90	1.75
SUL53206	SULLIVAN CR-6 TANK	2.15	2.00
SUL53208	SULLIVAN CR-8 TANK	2.15	2.00
SUL53210	SULLIVAN CR-10 TANK	2.40	2.25
SUL53212	SULLIVAN CR-12 TANK	2.40	2.25
SUL53304	SULLIVAN CSS-4 TANK	2.15	2.00
SUL53306	SULLIVAN CSS-6 TANK	2.40	2.25
SUL53308	SULLIVAN CSS-8 TANK	2.40	2.25
SUL53310	SULLIVAN CSS-10 TANK	2.55	2.40
SUL53312	SULLIVAN CSS-12 TANK	2.55	2.40
SUL53404	SULLIVAN CRST-4 TANK	2.15	2.00
SUL53406	SULLIVAN CRST-6 TANK	2.40	2.25
SUL53408	SULLIVAN CRST-8 TANK	2.40	2.25
SUL53410	SULLIVAN CRST-10 TANK	2.55	2.40
SUL53412	SULLIVAN CRST-12 TANK	2.55	2.40
SUL53504	SULLIVAN RST-4 TANK	1.95	1.80
SUL53506	SULLIVAN RST-6 TANK	2.20	2.10
SUL53508	SULLIVAN RST-8 TANK	2.20	2.10
SUL53510	SULLIVAN RST-10 TANK	2.35	2.20
SUL53512	SULLIVAN RST-12 TANK	2.35	2.20
SUL53601	SULLIVAN R-1 TANK	1.65	1.55
SUL53602	SULLIVAN R-2 TANK	1.75	1.65
SUL53604	SULLIVAN R-4 TANK	1.75	1.65
SUL53606	SULLIVAN R-6 TANK	1.95	1.80
SUL53608	SULLIVAN R-8 TANK	1.95	1.85
SUL53610	SULLIVAN R-10 TANK	2.20	2.10
SUL53612	SULLIVAN R-12 TANK	2.20	2.10
SUL53616	SULLIVAN R-16 TANK	2.20	2.10

Glider Accessories

These items will help you get the most out of your glider. With these items, you can adjust the position of the towhook, launch your machine aloft, aid its descent, and help in its control.

Airtronics brings us a bunch of glider things. They offer a variety of hi-starts that will launch your bird as high as you'll need to catch the lift that you know is just waiting for you. They also offer a few towhooks for various purposes. Check out the adjustable one for your latest FAI bird. You can also find their Vector Director . . . this is a control mixer for those V-tailed ships. It works like a charm and is simple to install.

Craft-Air also offers a selection of hi-starts, and you should note that they are the only manufacturer to offer a super-duty hi-start. This one will allow you to get better launches with those 11 foot-plus birds! Also available from this manufacturer is their spoiler kit. Although it is shown as a kit for their kits, it actually can be used with any glider. You can also add an engine for launching your glider, but if you don't want to have the drag penalty once the engine stops, get the Para-pod. It drops off when the engine stops, and floats gently down to ground via a parachute. Since it is mounted below the fuselage of your ship, you get little fuel residue on your proud bird.

Another source for hi-starts is AFI. They offer them in both standard and heavy-duty, also. They even have one with bungee cord as the rubber. This allows you a better pull in calmer conditions where the surgical tubing will not pull as well, due to its more gentle pull.

D&R offers their power pod for .049 engines. It even includes the fuel tank.

From Kraft, we have their control mixer. It can work either on one of their brick systems, or you can order it for use with any other system.

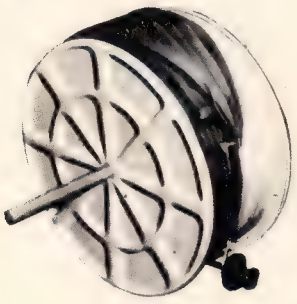


ASTRO FLIGHT (AFI)

ASTRO START AND HI-START KITS. These deluxe high start kits can be assembled in just a few minutes. The reel is glued together at the factory. Just attach the handles and hook up the line and chute. Comes complete with surgical tubing or bungee cord, reel line, swivels, tow ring, stake, and chute. Available in three sizes, standard for planes 70 to 100 inch span weighing up to 40 ounces, heavy duty for planes 100 to 120 inch span weighing up to 64 ounces. Astro with bungee cord for the big ones up to 16 feet span.

AFI20111	AFI ASTRO START	44.95	35.95
AFI20200	AFI HEAVY DUTY HIGH START	39.95	31.95
AFI20222	AFI STANDARD HIGH START	34.95	27.95

HI-START



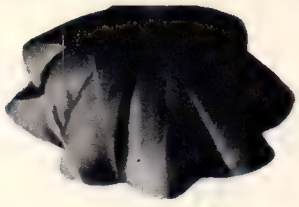
- Convenient Custom Reel
- One Piece Surgical Latex Tubing
- Nylon Tow Line
- Strong, Light Parachute
- Steel Stake
- Steel Tow Ring
- Strong, Steady Power
- Easy to Lay Out
- Easy to Retrieve
- Easy to Stow
- Easy to Store

STANDARD CLASS DELUXE HI-START
HS-1 . . . . . $34.95
Generally for sailplanes with wing spans of 100" or less.

HEAVY DUTY DELUXE HI-START
HS-2 . . . . . $39.95
Generally for sailplanes with wing spans of 90" or more.

SUPER DUTY DELUXE HI-START
HS-5 . . . . . $44.95
Super launches for super sailplanes.

NOTE: The HS-3 Standard regular, the HS-4 Heavy, and the HS-6 Super Duty replacement Hi-Start tubing packages are one piece surgical latex that are 100 feet long and directly replace original equipment on the three Hi-Starts. The SP-325 spoiler kit fits Windrifter and SD-100.



CRAFT-AIR

PARA-POD
PP-3 . . . . $9.95



HI-START PARACHUTE
PP-1 . . . . . $5.95

- A launching pod that drops off when the engine stops, and comes down on its own parachute.
- Fits all sailplanes up to 10 ft. wing span.
- Automatic drop or command drop (3rd channel not required).
- Takes engines up to .15 cu. in.
- Low engine power requirements (.049 takes 2 lb. glider 800').
- Includes parachute.

CRA20001	CRAFT AIR PP-1 PARACHUTE	5.95	5.50
CRA20003	CRAFT AIR PP-3 PARA-POD	9.95	8.75
CRA20010	CRAFT AIR HS-1 STD HI-START	34.95	27.95
CRA20020	CRAFT AIR HS-2 HVY HI-START	39.95	31.95
CRA20030	CRAFT-AIR HS-3 REGULAR TUBING	19.95	15.95
CRA20040	CRAFT-AIR HS-4 HEAVY TUBING	23.95	19.15
CRA20050	CRAFT-AIR HS-5 SUPER HI-START	53.95	35.95
CRA20060	CRAFT-AIR HS-6 SUPER TUBING	32.50	25.95
CRA20325	CRAFT-AIR SP-325 SPOILER	3.95	3.80



POWER PODS

For Questor and Super Questor. Uses Cox .049 Medallion or Tee-Dee engines. Molded nylon pod and fuel tank with all hardware included. Special hatch block and mounting plate allow easy mounting even at the field. ... **#AIR20502**

For Square Soar. Uses any Cox reed valve engine with fuel tank. Nylon mount and pre-cut wooden parts plus all hardware. Two hole mount for quick change. ... **#AIR20522**

For Olympic II. Uses Cox .09 Medallion or Tee-Dee engines. Rugged 1/4 birch ply pod mounts between wing panels and is easily mounted or removed. Complete with tank, spinner, and all hardware. ... **#AIR20527**

HI-START SURGICAL TUBING

Highest quality natural latex with additives specially formulated for abrasion and ozone resistance. Provides the highest energy available with a smooth steady pull for safe launches. Supplied in one unspliced 100 foot length.

Standard. 1/8 inch bore x 3/64 inch wall thickness. Suitable for most sailplanes up to 100 inch span, weighing 16 - 40 ounces. Use for Questor, Super Questor, Square Soar and Cadet. ... **#AIR20524**

Heavy Duty. 3/16 inch bore x 1/16 inch wall thickness. More power for larger sailplanes weighing 40 - 80 ounces. Use for Aquila, Grand Esprit and Olympic II. ... **#AIR20525**

LAUNCH CHUTES

Designed and manufactured by Jim White for Hi-Starts. Special vented design avoids drifting in windy conditions. Gored panels are cut from special rip-stop nylon for durability and minimum weight. Nylon shroud lines with anti-chafe ring attachments.

Standard. As furnished with Launch Pail for Hi-Start use only. Four panels and shroud lines. ... **#AIR20526**

Deluxe. For winch or Hi-Start. Eight panels and shroud lines. highest quality available. ... **#AIR20506**

AIRTRONICS

Launch your R/C sailplane to thermal altitude with a Hi-Start. Basically a big rubber band which is staked at the upwind end of the flying field with a length of monofilament line attached. The line is hooked to the model, the rubber stretched by walking back 200 - 300 feet before release. The pull of the rubber causes the model to rise steeply. Up to 500 foot altitudes can be acheived.

Includes continuous 100 foot length of special latex surgical tubing, a specially designed lightweight parachute, 400 feet of 30 pound test monofilament line, a line storage reel, stake, swivels, split rings and welded rings for the tubing.

Standard. 1/8" dia. x 3/64" wall tubing. For models weighing 16 - 40 oz. and most sailplanes up to 100" span. Use for Questor, Square Soar, Cadet, Super Questor or similar models. ... **#AIR20001**

Heavy Duty. 3/16" dia. x 1/16" wall tubing. For models weighing 40 - 80 oz. Use for Aquila, Olympic II, Grand Esprit or similar models. ... **#AIR20002**

TOW HOOKS

For attaching the tow ring to the sailplane for launching. Feature machined threads, blind mounting nuts and all hardware for secure, rigid mounting.

Regular Tow Hook. For R/C sailplanes weighing up to 3 pounds. Clean, one-hole mounting. .080 inch diameter. ... **#AIR20507**

Super Hook. For R/C sailplanes weighing over 3 pounds. Clean, one-hole mounting. .090 inch diameter. ... **#AIR20508**

Adjustable Super Hook. Provides the competition flier a means to achieve maximum launch height in all conditions. Rugged extruded aluminum bar with Tee-Slot allows infinite adjustment. All hardware and spare .090 inch diameter hook included.... **#AIR20511**

MISCELLANEOUS ACCESSORIES

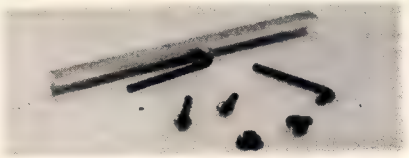
Deluxe Skid. For all R/C sailplanes this 1/8 inch x 1/2 inch x 12 inch long skid is molded from tough polyurethane rubber for maximum abrasion resistance. It will stand up to asphalt or concrete runways even on the largest ships. Hi-Tack contact adhesive and retaining screw for easy installation. ... **#AIR20514**

Vector Director. A mechanical mixer to integrate rudder and elevator servos. Eliminates sliding trays for elevons and flaper on controls on flying wing or Vee-Tail models. Includes all hardware including clevises, retainers, control rods, etc. Very compact and lightweight. Universal – can be used with any radio system. ... **#AIR20520**

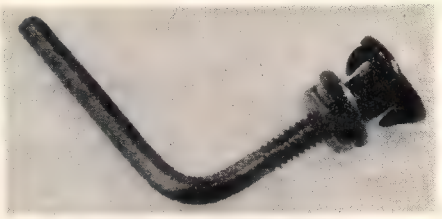
VECTOR DIRECTOR IS PICTURED ON PAGE 158



SUPER HOOK
For R/C Sailplanes weighing more than 3 lbs. Non-rusting stainless steel heat treated. .090" diameter by 1" long. Clean one hole mounting. Includes mounting hardware.



ADJUSTABLE SUPER HOOK
For R/C Sailplanes weighing more than 3 lbs. Rugged extruded aluminum bar with slot for infinite adjustment. Includes all mounting hardware and spare .090" diameter hook.

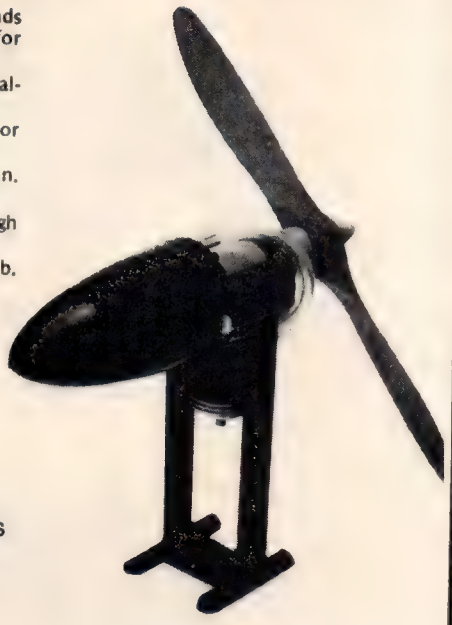


REGULAR TOWHOOK
For R/C Sailplanes with flying weight to 3 lbs. .080" dia. hook. Clean one-hole mounting.

AIR20001	AIRTRONICS 9504 LCH. PAIL STD.	36.95	29.55
AIR20002	AIRTRONICS 9505 LCH. PAIL H.D.	38.95	31.15
AIR20502	AIRTRONICS 9502 P-POD QUESTOR	7.95	7.15
AIR20506	AIRTRONICS 9506 DELUXE CHUTE	13.95	11.85
AIR20507	AIRTRONICS 9507 REGULAR HOOK	.75	.70
AIR20508	AIRTRONICS 9508 SUPER HOOK	1.25	1.20
AIR20511	AIRTRONICS 9511 ADJUSTBLE HOOK	2.50	2.40
AIR20514	AIRTRONICS 9514 DELUXE SKID	1.95	1.85
AIR20520	AIRTRONICS 9520 VECTOR DIRECTR	3.95	3.60
AIR20522	AIRTRONICS 9522 P-POD SQ SOAR	2.95	2.75
AIR20524	AIRTRONICS 9524 STD TUBING	18.50	15.75
AIR20525	AIRTRONICS 9525 HEAVY TUBING	20.50	17.45
AIR20526	AIRTRONICS 9526 STD CHUTE	7.95	7.15
AIR20527	AIRTRONICS 9527 P-POD OLYMP II	9.95	8.95

D & R

- Will mount with rubber bands or can be screwed down for permanent installation.
- Fits Cox Tee Dee and Medallion .049 and .051 engines.
- Engine mounts upright or inverted.
- Running time approx. 4 min.
- Total weight 3/4 oz.
- Injection molded from tough nylon.
- Plenty of power for 3 lb. airplanes.



D & R POWER POD
Comes complete less engine and prop.

D&R14001 D&R POWER POD 4.95 4.45

KRAFT

elevon linkage



Operates Elevons or Flaperons From Two KPS-12 Servos or 2 Channel Receiver-Servo

The Kraft elevon linkage will accomplish quite simply what complex linkages, which often had interaction, used to do. It will operate elevons or flaperons directly from a 2 channel receiver-servo or two KPS-12 servos. Glider pilots using "V" tails and wings, and pilots using powered delta type aircraft will find the elevon linkage to be of great value.

ELEVON LINKAGE KIT
(Operates elevons or flaperons from two KP-12 servos or all 2/3 channel receiver-blocks, except 1976 and later.)
Part No. 200-087

UNIVERSAL LINKAGE KIT
(For use with servos other than KPS-12.)
Part No. 200-117

KRA2087 KRAFT 200-087 ELEVON LINKAGE 3.99 3.75
KRA2117 KRAFT 200-117 UNVSL ELEVON LNG 3.98 3.75

Miscellaneous

Miscellaneous! This title sure gives you an idea of what to expect in this section. Really, we have used this title to group any item or items which really did not belong in any other category, yet there were not enough of each type of make another new category. Here you'll find field boxes, floats, some scale goodies, some safety items, and a bunch of other items that really are nice to have.

If you need a good field box, we have two to choose from: the Goldberg Handi-Tote, and the Craft-Air Field box. The Handi-tote is made of plywood, and comes disassembled. It goes together quite rapidly, and the only glue you need is a good white or aliphatic resin glue. When it's all built, put on a good fuel-proof finish and you're in business. A smaller version, called the Mini-Tote is also available.

The Craft-air field box is already made. It's made of a plastic that is really fantastic. It will withstand almost anything you can throw at it. It is fuel-proof, waterproof, shockproof, and almost idiot-proof. This unit is a bit larger than the Handi-tote, and so it can hold more goodies. Both units will hold a can of fuel, a motorcycle battery, a power-panel, and lots of tools, props and other things. Both boxes feature a drawer in the front to hold whatever you please.

If you want to make a floatplane, then look at what is brought out by Gee-Bee and Sureflite. Both firms offer a selection of floats for almost any size plane.

Robart offers their Scale Gear Struts and Super Stand. The struts make your plane look as though it had authentic oleo struts. The Super stand provides you with a support for your model while you're working on it.

Prather offers their Sun Shield and Transmitter Cover. The use of these is explained in the pictures.

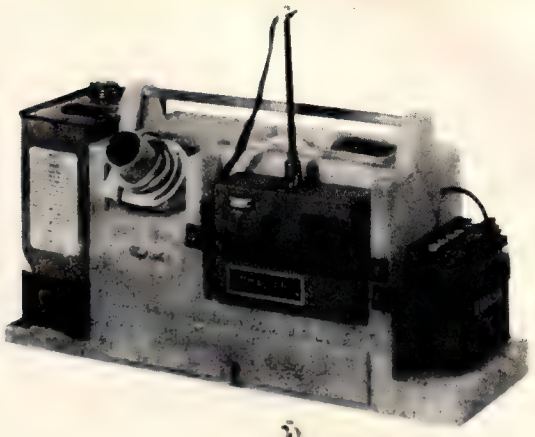
Kraft offers a transmitter tray so that you can support your transmitter for smoother flying. Fly like Hanno Prettner and Wolfgang Matt . . . the two best fliers in the World . . . or at least Las Vegas!

We also include the nice line of the Tower Trophy Collection. These items make fine gifts for your favorite people . . . or even yourself!

CRAFT-AIR

At Last!

A QUALITY FIELD SUPPORT BOX AT A REASONABLE PRICE



AND WHAT'S MORE IT. . .

- IS NOT A KIT.
- DOESN'T NEED TO BE GLUED TOGETHER.
- DOESN'T NEED TO BE PAINTED.
- WON'T ABSORB FUEL OILS.
- WON'T BREAK.

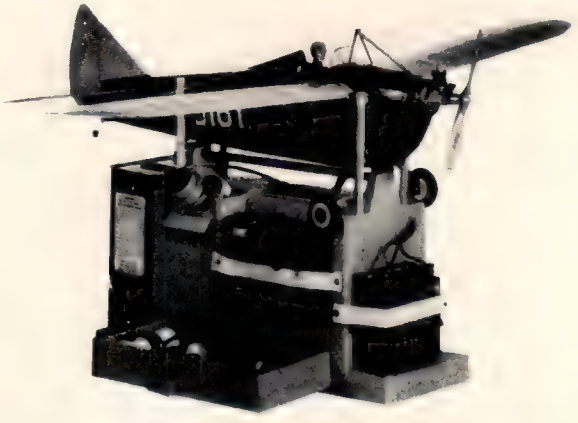
That's what it ain't. . . . . .



What it is. . . .

- IS READY TO USE.
- IS MADE OF HI-DENSITY POLYETHELENE (U-V STABILIZED.)
- IS PRACTICALLY INDESTRUCTIBLE.
- IS EASY TO KEEP CLEAN.
- HOLDS MOTORCYCLE OR GEL-CELL BATTERY SECURELY.
- HOLDS ANY SIZE CAN OF FUEL SECURELY.
- HOLDS ANY SIZE TRANSMITTER SECURELY.
- HOLDS ANY STARTER IN REMOVABLE STARTER WELL.
- HOLDS PROPS, TOOLS, ETC., IN LARGE 12 1/2"x6 3/4"x2" DRAWER.
- HAS REMOVABLE 4"x7"x4" DITTY WELL IN TOP.
- HAS VARATHANE COATED HANDLE [*at C.G. for any loading*]
- HAS ROOM FOR MOUNTING POWER PANEL, E.S.V., ETC.
- IS ATTRACTIVE BRIGHT YELLOW WITH TEXTURED FINISH.
- INCLUDES 10 MINUTE INSTRUCTIONS FOR AIRCRAFT CRADLE.

- AND BEST OF ALL. . . . . IT'S ONLY



CRA90100	CRAFT-AIR FB-1 FIELD BOX	29.95	23.95

GEE BEE



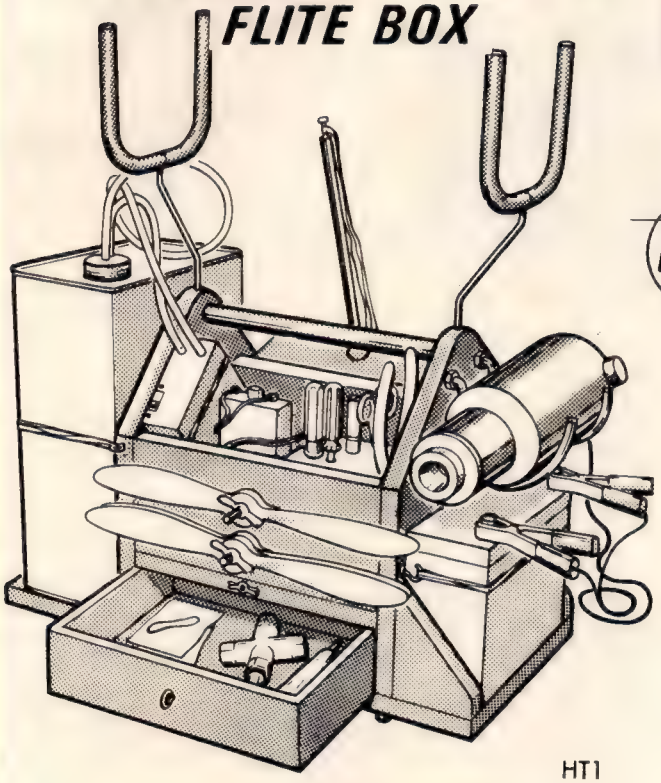
FLOATS

FLOATS

Proven design in years of flying - easily adaptable to most models virtually indestructible - complete and ready to fly - now in two sizes -
28" for 20 to 40 power
33" for 40 to 60 power

GBE20028	GEE BEE FLOATS 28 IN.	20.95	16.75
GBE20033	GEE BEE FLOATS 33 IN.	22.95	18.35

HANDI-TOTE FLITE BOX



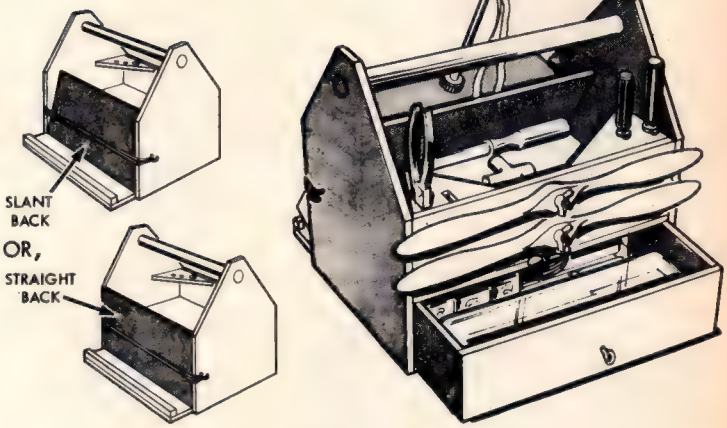
HT1

Here's the Flite Box that won't give you a hernia! Compact like you won't believe, yet room for everything you need. HANDI-TOTE was designed by Bob Rich, a practical modeler who flies a lot as he travels around (he's our field representative!). Kwik-Assembly kit **HT1**,

FOR ASSEMBLY, THE FOLLOWING IS REQUIRED:
A good glue such as Tite-bond, Wilhold or epoxy, fine and medium sandpaper, stain (if desired), fuelproof finish such as polyurethane varnish, a 7/32" drill bit, thin plastic film such as Saran Wrap, 1/32" to 1/16" x 6" x 7-3/4" cardboard, and Scotch or masking tape. Use glue according to manufacturer's instructions.

MINI-TOTE FLITE BOX

GOLDBERG MT-1



The solid success of the Handi-Tote leads naturally to the MINI-TOTE. For the modeler who just wants a flite-line box without a starter and big battery, gallon of fuel or airplane carriers, etc. Mini-Tote builds quickly and easily from accurately cut parts, carries everything you need for quick service. Suitable for control line and R/C. Vertical panel can be tilted for transmitter use. **MT-1**

FOR ASSEMBLY, THE FOLLOWING IS REQUIRED:
A good glue such as Tite-bond, Wilhold or an epoxy, fine and medium sandpaper, stain (if desired), fuelproof finish such as polyurethane varnish, thin plastic film such as Saran Wrap, 1/32" to 1/16" x 6" x 7-3/4" cardboard, two books for weights, Scotch or masking tape for correcting warps and twists inherent in all 1/4" thick plywood and to hold glued joints in place until dry.

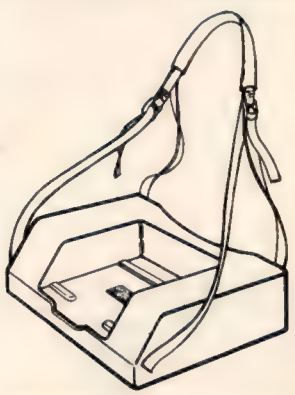
GBG90000	GOLDBERG MT-1 HANDI-TOTE	15.95	11.95
GBG90001	GOLDBERG MT-1 MINI-TOTE	8.95	6.75

KRAFT

TRANSMITTER TRAY



- **VACUUM MOLDED OF DURABLE ROYALITE® PLASTIC**
- **ADJUSTABLE STRAPS FOR BALANCE AND FIT**
- **VELCRO® INSERT FOR SECURE MOUNTING**



Transmitter trays have long been used by the world's best fliers for the most accurate control possible. Our trays may be used with all Kraft Series Seventy-One and later dual stick transmitters, and many other brands. Long transmitter sticks are recommended to be used with this tray.

Part Number 200-142.

KRA20142	KRAFT 200-142 TRANSMITTER TRAY	19.95	17.95

PRATHER

TRANSMITTER COVER

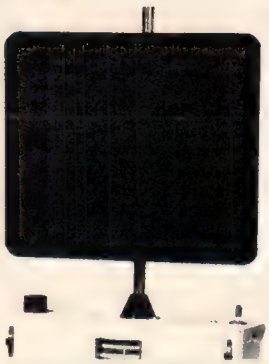


RAWHIDE VINYL

PROTECT YOUR TRANSMITTER

- Dirt & Dust Proof ▪
- Water Resistant ▪
- Protects Trim Buttons ▪

Custom made with zipper top



SNAPS ON ANTENNA

SUN SHIELD

PROTECTS AGAINST GLARE
•
NO DISTORTIONS
•
IDEAL FOR SOARING

Save your plane that could be lost from sunglare

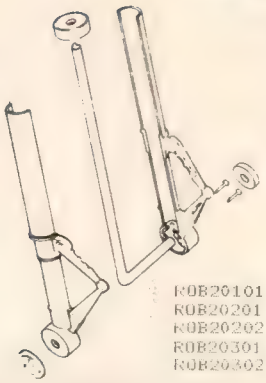
PRA21090	PRATHER #109 TRANSMITTER COVER	4.98	4.50
PRA21190	PRATHER #119 SUN SHIELD	3.98	3.60

ROBART

super stand

- FOR FIELD MAINTENANCE
- POINT TO POINT CARRIER
- BUILT–IN TRAY AREAS
- BUILDING / ALIGNMENT JIG
- PAINTING...AN EXTRA HAND
- STORAGE STAND





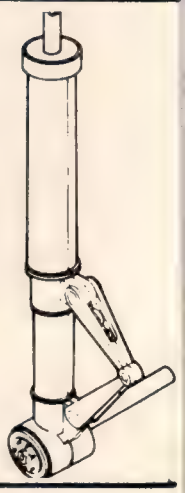
3 gear trike set:
small #ROB20302
large #ROB20301

2 gear mains set:
small #ROB20202
large #ROB20201

scale gear strut

SCALE DETAIL THAT COVERS THOSE UGLY MUSIC WIRE LANDING GEARS

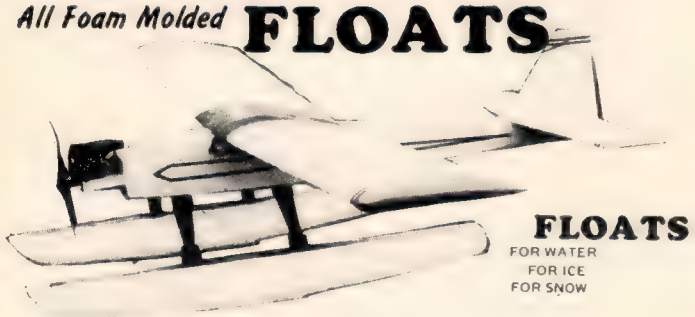
AVAILABLE IN TWO STYLE.



ROB20101	ROBART SUPER STAND	4.98	4.95
ROB20201	ROBART SCALE GR STRUT SGSM1 LG	1.98	1.85
ROB20202	ROBART SCALE GR STRUT SGSM2 SM	1.98	1.85
ROB20301	ROBART SCALE GR STRUT SGST1 LG	2.49	2.35
ROB20302	ROBART SCALE GR STRUT SGST2 SM	2.49	2.35

SUREFLITE

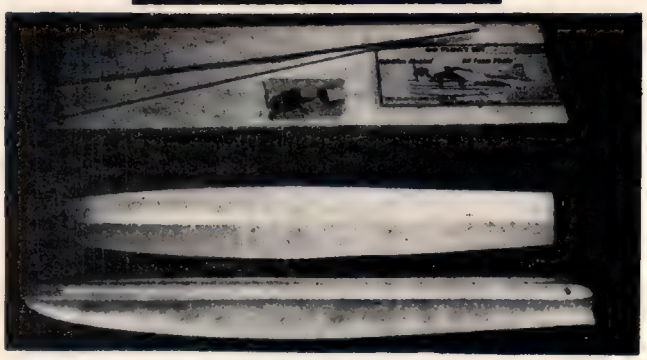
All Foam Molded **FLOATS**



FLOATS
FOR WATER
FOR ICE
FOR SNOW

No. 204 10 oz. Floats for Planes to 5½ lbs.

No. 207 11 oz. Floats for Planes to 10½ lbs.



SUR7004	SUREFLITE 204 FLOATS (10 oz)	11.95	9.95
SUR7007	SUREFLITE 207 FLOATS (11 oz)	14.95	11.95



SEMCO

Transmitter Strap

Genuine leather strap makes transmitter handling a breeze and relaxes hands while flying for the best control. Strap comes with hook and swivel. Keeps your valuable control system safe.

SEM83012	SEMCO TRANSMITTER STRAP #TS-12	2.69	2.45



TATONE

A.M.A. SAFETY RULE PROP NUTS

TAT1014	TATONE #14 AMA PROP NUT-1/4 IN	2.05	1.95

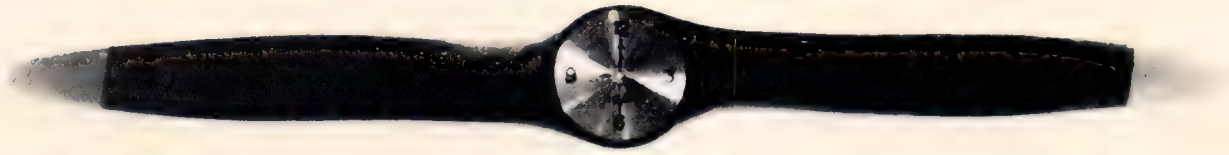
NEED MORE INFORMATION ABOUT ANY OF THE PRODUCTS PICTURED OR LISTED IN THIS CATALOG? IF SO, USE THE HANDY "TOWER ACTION POST CARDS" ON PAGE 291. MAIL THEM DIRECTLY TO THE MANUFACTURER AND GET FULL INFORMATION.

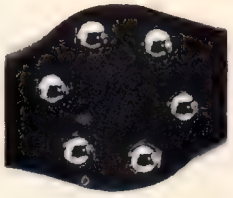
INTRODUCING THE

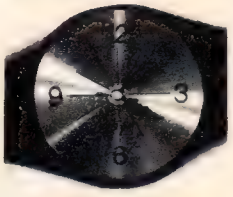
TOWER HOBBIES TROPHY COLLECTION

TOWER NOW BRINGS YOU THESE UNIQUE DISPLAY ITEMS AS A TRIBUTE TO YOU AND YOUR HOBBY. EACH OF THESE ITEMS HAS BEEN CAREFULLY SELECTED BY TOWER FOR YOU TO DISPLAY WITH PRIDE. ADD A TOUCH OF YOUR HOBBY TO YOUR FAVORITE ROOM WITH THESE BEAUTIFUL CONVERSATION — STARTING, TROPHIES. GREAT FOR OFFICE, DEN, FAMILY ROOM, OR EVEN YOUR WORKSHOP!

YOUR FRIENDS WILL ENVIOUSLY COMPLIMENT YOU AND DEMAND TO KNOW WHERE YOU FOUND SUCH UNUSUAL ITEMS. THEY'RE TOWER HOBBIES EXCLUSIVES, IF YOU SHOULD DECIDE TO REVEAL YOUR SOURCE.







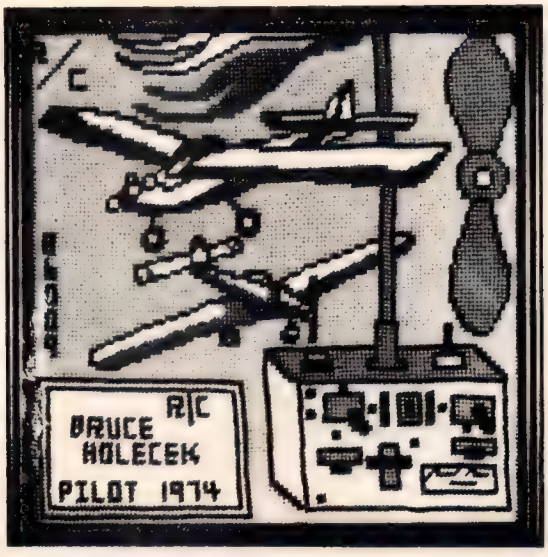
from the Trophy Collection . . .

TOWER HOBBIES DECORATIVE PROPELLERS

Now, for the first time, these high quality, simulated wood decorative display propellers are available at a price far below any of the used unairworthy props now being sold for decoration. These full size props are 44" long and are similar in size and design to props used on the famous Pitts Special. Props are dark walnut colored with red tips and are available with either chrome nut covers or a fine gold faced clock in the hub. Comes totally complete and ready to hang.

TOWER HOBBIES DECORATIVE PROPELLER WITH CHROME NUT COVERS #TOW99100
TOWER HOBBIES DECORATIVE PROPELLER WITH GOLD FACED CLOCK #TOW99200

TOW99100	TOWER DISPLAY PROP W/BOLTS	39.95	27.95
TOW99200	TOWER DISPLAY PROP W/CLOCK	54.95	39.95
TOW99300	TOWER RC PILOT NEEDLEPOINT KIT	24.95	16.95



from the Trophy Collection . . .

the "R/C FLYER" Needlepoint Kit

This totally unique "R/C FLYER" needlepoint kit is the only one of its kind in the world. It features everything needed for completion . . . needle, detailed instructions, lettering chart for customizing your name and AMA number into the pattern, hand painted 12 mesh white imported mono canvas, and imported Persian yarn in beautiful colors.

Give it to your wife, girl friend, mother -- even your mother-in-law! In return she will give you the most unique trophy you have ever displayed in your workshop. Or, make it yourself and take it to the next club meeting for "Show and Tell" time!

R/C FLYER NEEDLEPOINT KIT #TOW99300

(actual size is 10" x 10")

TOWER HOBBIES TROPHY COLLECTION ITEMS ARE AVAILABLE AT A SPECIAL DISCOUNT PRICE TO CLUBS OR OTHER ORGANIZATIONS FOR USE AS PRIZES OR TROPHIES FOR CONTESTS, BANQUETS, AWARDS, ETC.. SPECIAL PRICES WILL BE SENT UPON RECEIVING WRITTEN INQUIRY ON CLUB LETTERHEAD. NO PRICES GIVEN OVER THE PHONE.

WILLIAMS BROS.

Scale Pilots



Any one of these pilots will add realism to your favorite model. Molded of high impact, paintable styrene, you can color them to your choice.

	MILITARY		STANDARD		RACING		SPORTSMAN	
SCALE	Military No.	Approx. Height	Standard No.	Approx. Height	Racing No.	Approx. Height	Sportsman No.	Approx. Height
1"	170	1¼"	174	1 3/16"	178	1¼"	182	1 3/16"
1½"	171	1⅞"	175	1¾"	179	1 13/16"	183	1 13/16"
2"	172	2 9/16"	176	2⅜"	180	2 7/16"	184	2⅜"
2⅝"			177	3 1/16"	181	3 3/16"	185	2⅝"

2" SCALE MACHINE GUN KITS

A World War I model plane without fire power? Unthinkable!! Equip it with the correct aircraft machine gun for your particular plane. The four most popular guns now are available in kit form, complete with easy to follow assembly instructions. Extensive research for authenticity and meticulous care in creation of the mold assures accurate detail.



No. 161

LEWIS

The American made LEWIS Aircraft Machine Gun was used on Allied fighter, bomber and observation aircraft during World War I. It was employed singly, in pairs, and in conjunction with other guns. Generally it was mounted at the rear cockpit for defense of tail by the observer. The LEWIS was the original gun designed for pusher planes to put the gun up front.



No. 160

VICKERS

England's contribution to aircraft firepower was the VICKERS Aircraft Machine Gun. It was used extensively on Allied fighter and reconnaissance planes of World War I. It was mounted as a forward firing weapon, operated by the pilot, and synchronized to fire between the propeller blades.



No. 163

PARABELLUM

The Parabellum, a German Aircraft Machine Gun, was developed in the year 1913 and used throughout World War I. It was used on all two seater and bomber aircraft. On early fighter planes it was sometimes found mounted on the cowling with the shots synchronized to fire between the propeller blades.



No. 162

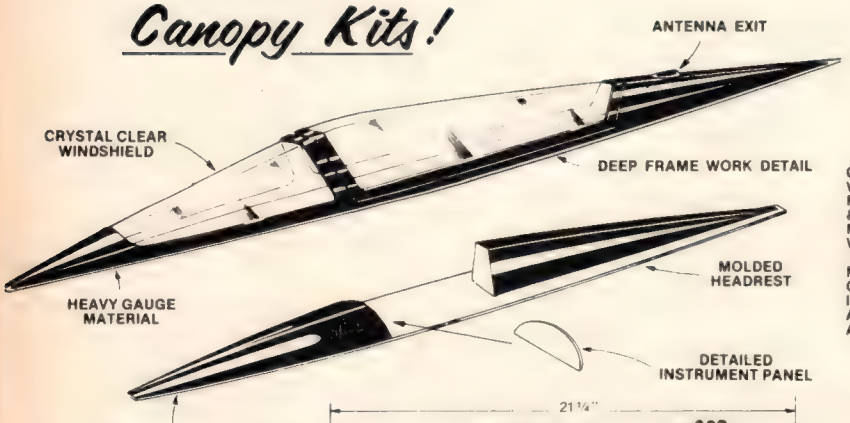
SPANDAU

The SPANDAU was one of two Aircraft Machine Guns used on German fighter and reconnaissance aircraft. It was the favorite weapon of the Red Baron, the Ace of Germany's Air Corps. With an inline engine they were usually mounted in pairs, one on each side. On planes with a radial engine they were mounted side by side on top.

WBR20170	WILLIAMS PILOT #170 MIL 1	.85	.80
WBR20171	WILLIAMS PILOT #171 MIL 1 1/2	1.20	1.15
WBR20172	WILLIAMS PILOT #172 MIL 2	1.40	1.35
WBR20174	WILLIAMS PILOT #174 STD 1	.85	.80
WBR20175	WILLIAMS PILOT #175 STD 1 1/2	1.20	1.15
WBR20176	WILLIAMS PILOT #176 STD 2	1.40	1.35
WBR20177	WILLIAMS PILOT #177 STD 2 5/8	1.95	1.85
WBR20178	WILLIAMS PILOT #178 RAC 1	.85	.80
WBR20179	WILLIAMS PILOT #179 RAC 1 1/2	1.20	1.15
WBR20180	WILLIAMS PILOT #180 RAC 2	1.40	1.35
WBR20181	WILLIAMS PILOT #181 RAC 2 5/8	1.95	1.85
WBR20182	WILLIAMS PILOT #182 SPT 1	.85	.80
WBR20183	WILLIAMS PILOT #183 SPT 1 1/2	1.20	1.15
WBR20184	WILLIAMS PILOT #184 SPT 2	1.40	1.35
WBR20185	WILLIAMS PILOT #185 SPT 2 5/8	1.95	1.85
WBR90160	MACHINE GUN 160 VICKERS	2.75	2.60
WBR90161	MACHINE GUN 161 LEWIS	2.20	2.10
WBR90162	MACHINE GUN 162 SPANDAU	2.75	2.60
WBR90163	MACHINE GUN 163 PARABELLUM	2.89	2.75

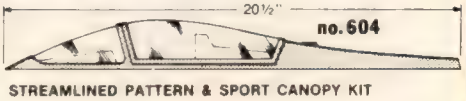
WING MFG. CO.

Canopy Kits!



LOW PROFILE SPEED & SPORT CANOPY KIT

GIVE YOUR AIRPLANE A NEW, EXCITING LOOK WITH A WING CANOPY KIT, THE LIKES OF WHICH YOU HAVE NEVER SEEN BEFORE. YOU GET A TOP QUALITY CANOPY WITH CRISP FRAMEWORK DETAIL (EASY TO PAINT), MOLDED COCKPIT INSERT INCLUDING HEADREST & FRONT PANEL DECK, DETAILED PRINTED INSTRUMENT PANEL & ILLUSTRATED MOUNTING INSTRUCTIONS WITH TINTING PROCEDURES. CANOPY KITS FIT: KAOS, MACH I, NEW ORLEANIAN, ORION, TAURUS, SKYLARK, INTEGRA II, MISS NORWAY AND MOST OTHER LOW WING AIRCRAFT.



STREAMLINED PATTERN & SPORT CANOPY KIT

WIN20602	WING LOW PROFILE CANOPY #602	4.95	4.50
WIN20604	WING STREAMLINED CANOPY #604	4.95	4.50

Paints and Painting Accessories

The application of paint to a plane is an area of mystery to many modelers. It seems to be a field with many "secret" techniques and tools. It is not. It is quite simple to paint well when you have learned a few basics of paint use.

The first point is to make sure the surface you want to paint is as smooth as you can make it. This means that you must use a lot of elbow grease and sand paper. There is a saying that your finish will only be as good as the amount of sandpaper you have used to prepare your surface.

After you have carved your model to its basic shape, you dig out the sandpaper. Start with a Medium grit. Anything coarser, and you will be making a mess of deep gouges, which will be difficult to smooth out. Use a large sanding block when you use a coarse paper so that you will not leave marks to show where your fingers were . . . your fingers cannot sand evenly.

When you have gotten the contours to where you want them, use a finer grit. Keep sanding, using finer and finer grits until you are using an "extra fine" grit. The balsa should be very smooth by now. Your plane is now ready to be filled.

Some people will just fill the surface as soon as they have sanded enough to get the contours of the plane right, but if you sand until the balsa is smooth, you will use less filler, get a lighter plane, and still wind up with an excellent finish.

At this point, you should follow the recommended method for applying the filler and finish. If the paint manufacturer does not recommend a particular filler or primer, you can use any of the fillers or primers we carry. They will work with any of the paints we carry with one exception. Pactra dope is very particular to the kind of surface over which it's being applied. It is recommended that you use the Pactra Balsa fillercoat to fill the balsa surface, and then apply their Sanding Sealer just before you apply the paint. Alternatively, you could just apply coat after coat of Clear until the surface is as smooth as you would like. This works, and it's the way we did it until the modern finishes began to appear.

One question which we hear a lot refers to the application of a fiberglass finish to a balsa model. "Glassing" the model is not difficult, and while it does add some weight, it also increases the strength of the model by a large amount.

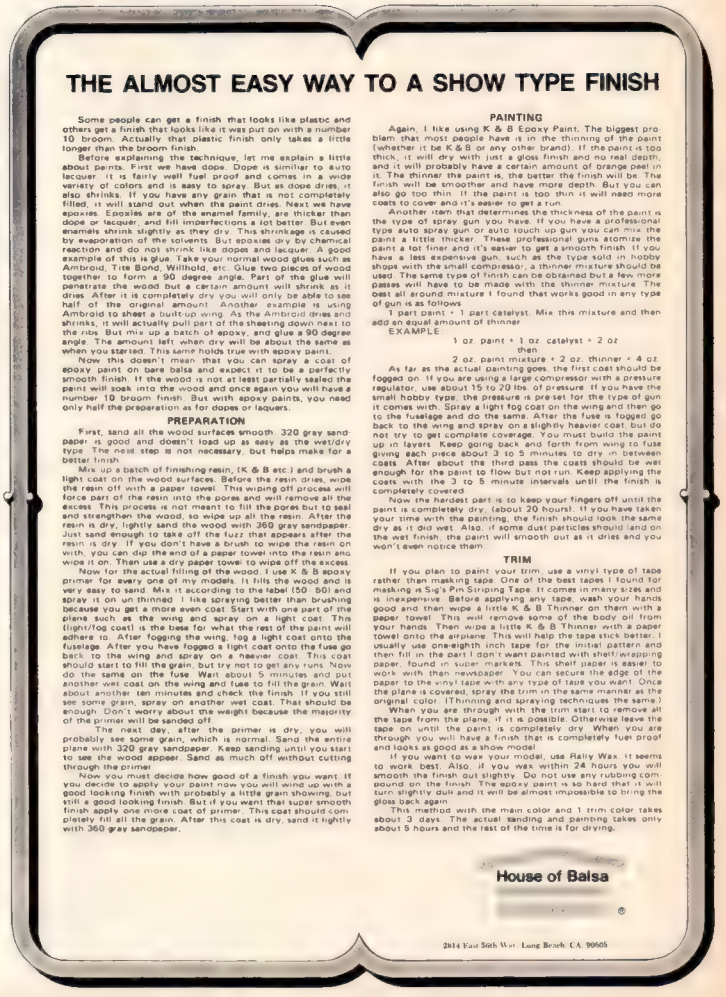
The word "fiberglass" refers to the cloth that is applied while "glassing," not the material used to bind the cloth to the plane. You should use 3/4 ounce fiberglass cloth as the fabric. You can use either polyester resin or epoxy resin as the adhesive. When you use an epoxy, you must use a slow-curing one, such as Hobbypoxy Formula II, or Southern R/C Products Mix-A-Matic Epoxy.

First, lay the cloth on the surface you wish to glass, such as the wing. It should be cut so that it is about one inch oversize in all directions. Brush on a coat of the resin and make sure you have brushed it evenly all over the surface. Do not try to spread it too thinly, as you will pull the cloth out of position.

Once you have the entire surface covered with the resin, get a plastic or rubber squeegee (even a piece of shirt-cardboard with a straight edge will do) and gently scrape away as much resin as you can. Apply just enough pressure so that the resin will be squeezed out, but not so much that you move the cloth. You should wind up with just enough resin to fill the spaces in the weave of the cloth. Now let it cure.

When it hardens, you should have a smooth but thin layer of resin over the cloth. When you sand this, do not cut the cloth. If you must, another coat of resin may be applied, but make sure that you do not make it too thick.

When you are ready to paint, you can apply your favorite primer over the resin. You should get a very smooth and glossy finish by using this method (unless you use a flat-finish paint for a military job).



THE ALMOST EASY WAY TO A SHOW TYPE FINISH

Some people can get a finish that looks like plastic and others get a finish that looks like it was put on with a number 10 broom. Actually that plastic finish only takes a little longer than the broom finish.

Before explaining the technique, let me explain a little about paints. First we have dope. Dope is similar to auto lacquer. It is fairly well fuel proof and comes in a wide variety of colors and is easy to spray. But as dope dries, it also shrinks. If you have any grain that is not completely filled, it will stand out when the paint dries. Next we have epoxies. Epoxies are of the enamel family, are thicker than dope or lacquer, and fill imperfections a lot better. But even enamels shrink slightly as they dry. This shrinkage is caused by evaporation of the solvents. But epoxies dry by chemical reaction and do not shrink like dopes and lacquer. A good example of this is glue. Take your normal wood glues such as Ambroid, Tite Bond, Willhold, etc. Glue two pieces of wood together to form a 90 degree angle. Part of the glue will penetrate the wood but a certain amount will shrink as it dries. After it is completely dry you will only be able to see half of the original amount. Another example is using Ambroid to sheet a built-up wing. As the Ambroid dries and shrinks, it will actually pull part of the sheeting down next to the ribs. But mix up a batch of epoxy, and glue a 90 degree angle. The amount left when dry will be about the same as when you started. This same holds true with epoxy paints.

Now this doesn't mean that you can spray a coat of epoxy paint on bare balsa and expect it to be a perfectly smooth finish. If the wood is not at least partially sealed the paint will soak into the wood and once again you will have a number 10 broom finish. But with epoxy paints, you need only half the preperation as for dopes or lacquers.

PREPARATION

First, sand all the wood surfaces smooth. 320 gray sandpaper is good and doesn't load up as easy as the wet/dry type. The next step is not necessary, but helps make for a better finish.

Mix up a batch of finishing resin, (K & B etc.) and brush a light coat on the wood surfaces. Before the resin dries, wipe the resin off with a paper towel. This wiping off process will force part of the resin into the pores and will remove all the excess. This process is not meant to fill the pores but to seal and strengthen the wood, so wipe up all the resin. After the resin is dry, lightly sand the wood with 360 gray sandpaper. Just sand enough to take off the fuzz that appears after the resin is dry. If you don't have a brush to wipe the resin on with, you can dip the end of a paper towel into the resin and wipe it on. Then use a dry paper towel to wipe off the excess.

Now for the actual filling of the wood. I use K & B epoxy primer for every one of my models. It fills the wood and is very easy to sand. Mix it according to the label (50-50) and spray it on un-thinned. I like spraying better than brushing because you get a more even coat. Start with one part of the plane such as the wing and spray on a light coat. This (light/fog coat) is the base for what the rest of the paint will adhere to. After fogging the wing, fog a light coat onto the fuselage. After you have fogged a light coat onto the fuse go back to the wing and spray on a heavier coat. This coat should start to fill the grain, but try not to get any runs. Now do the same on the fuse. Wait about 5 minutes and put another wet coat on the wing and fuse to fill the grain. Wait about another ten minutes and check the finish. If you still see some grain, spray on another wet coat. That should be enough. Don't worry about the weight because the majority of the primer will be sanded off.

The next day, after the primer is dry, you will probably see some grain, which is normal. Sand the entire plane with 320 gray sandpaper. Keep sanding until you start to see the wood appear. Sand as much off without cutting through the primer.

Now you must decide how good of a finish you want. If you decide to apply your paint now you will wind up with a good looking finish with probably a little grain showing, but still a good looking finish. But if you want that super smooth finish apply one more coat of primer. This coat should completely fill all the grain. After this coat is dry, sand it lightly with 360 gray sandpaper.

PAINTING

Again, I like using K & B Epoxy Paint. The biggest problem that most people have is in the thinning of the paint (whether it be K & B or any other brand). If the paint is too thick, it will dry with just a gloss finish and no real depth, and it will probably have a certain amount of orange peel in it. The thinner the paint is, the better the finish will be. The finish will be smoother and have more depth. But you can also go too thin. If the paint is too thin it will need more coats to cover and it's easier to get a run.

Another item that determines the thickness of the paint is the type of spray gun you have. If you have a professional type auto spray gun or auto touch up gun you can mix the paint a little thicker. These professional guns atomize the paint a fot finer and it's easier to get a smooth finish. If you have a less expensive gun, such as the type sold in hobby shops with the small compressor, a thinner mixture should be used. The same type of finish can be obtained but a few more passes will have to be made with the thinner mixture. The best all around mixture I found that works good in any type of gun is as follows

1 part paint + 1 part catelyst. Mix this mixture and then add an equal amount of thinner.

EXAMPLE:

1 oz. paint + 1 oz. catelyst = 2 oz.

then

2 oz. paint mixture + 2 oz. thinner = 4 oz.

As far as the actual painting goes, the first coat should be fogged on. If you are using a large compressor with a pressure regulator, use about 15 to 20 lbs. of pressure. If you have the small hobby type, the pressure is pre-set for the type of gun it comes with. Spray a light fog coat on the wing and then go to the fuselage and do the same. After the fuse is fogged go back to the wing and spray on a slightly heavier coat, but do not try to get complete coverage. You must build the paint up in layers. Keep going back and forth from wing to fuse giving each piece about 3 to 5 minutes to dry in between coats. After about the third pass the coats should be wet enough for the paint to flow but not run. Keep applying the coats with the 3 to 5 minute intervals until the finish is completely covered.

Now the hardest part is to keep your fingers off until the paint is completely dry, (about 20 hours). If you have taken your time with the painting, the finish should look the same dry as it did wet. Also, if some dust particles should land on the wet finish, the paint will smooth out as it dries and you won't even notice them.

TRIM

If you plan to paint your trim, use a vinyl type of tape rather than masking tape. One of the best tapes I found for masking is Sig's Pin Striping Tape. It comes in many sizes and is inexpensive. Before applying any tape, wash your hands good and then wipe a little K & B Thinner on them with a paper towel. This will remove some of the body oil from your hands. Then wipe a little K & B Thinner with a paper towel onto the airplane. This will help the tape stick better. I usually use one-eighth inch tape for the initial pattern and then fill in the part I don't want painted with shelf wrapping paper, found in super markets. This shelf paper is easier to work with than newspaper. You can secure the edge of the paper to the vinyl tape with any type of tape you want. Once the plane is covered, spray the trim in the same manner as the original color. (Thinning and spraying technique the same.)

When you are through with the trim start to remove all the tape from the plane, if it is possible. Otherwise leave the tape on until the paint is completely dry. When you are through you will have a finish that is completely fuel proof and looks as good as a show model.

If you want to wax your model, use Rally Wax. It seems to work best. Also, if you wax within 24 hours you will smooth the finish out slightly. Do not use any rubbing compound on the finish. The epoxy paint is so hard that it will turn slightly dull and it will be almost impossible to bring the gloss back again.

This method with the main color and 1 trim color takes about 3 days. The actual sanding and painting takes only about 5 hours and the rest of the time is for drying.

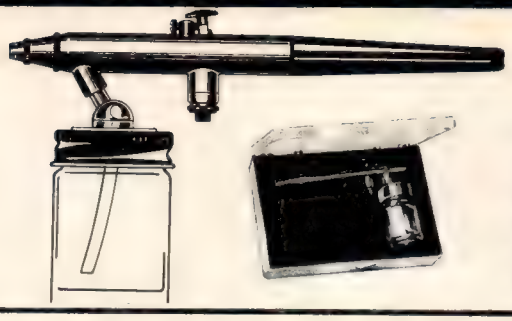
House of Balsa

[redacted]

2814 East 56th Way, Long Beach, CA. 90805

BADGER

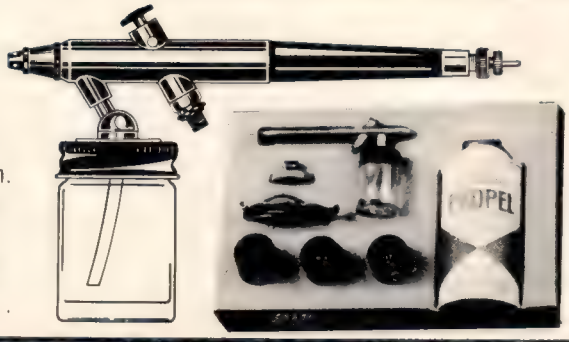
The Badger 150 is a double action, internal mix air-brush. Because of the professional quality of these air-brushes, they are used when fine detailing and delicate touch-up are needed



DOUBLE ACTION, INTERNAL MIX

150 IL Poster Air-Brush Kit contains:
fine line air-brush (for light to medium material uses and faster feed) with attached ¾ oz. jar, protective cap, extra needle, 2 oz. jar with cover, wrench for head, color cup, instruction booklet, plastic case, air-brush holder.

The Badger 200 is a single action, internal mix air-brush. Ideal for touch-ups, arts and crafts, furniture refinishing, model airplanes, cars, trains and many household uses . . .



SINGLE ACTION, INTERNAL MIX

200-1 Air-Brush Kit contains:
fine line air-brush (for light to medium material uses and faster feed two ¾ oz. jars with covers, protective cap, wrench for head, how t air-brush instruction manual and plastic case.

200-3 Deluxe Kit contains:
fine line air-brush (for light to medium material uses and faster feed with attached ¾ oz. jar, protective cap, 6 ft. light weight vinyl air hose, propel regulator, three ¾ oz. jars with covers, propel can wrench for head, and how to air-brush instruction manual.

The all NEW Badger 350 is a single action external mix air-brush. Great for handyman, craftsman, hobbyist, do-it-yourselfer, and just about EVERYONE . . .



350-3 Air-Brush Set contains:
medium line air-brush, 6 ft. vinyl air-hose, 2 oz. jar with cover, ¾ o jar with cover, ¼ oz. color cup, wrench, propel regulator, propel ca and how to air-brush manual.

SINGLE ACTION, EXTERNAL MIX

350-1-F Air-Brush Kit contains:
fine line air-brush, 2 oz. jar with cover, ¾ oz. jar with cover, wren how to air-brush manual and plastic case.

The Badger MINI SPRAY GUN is a single action external mix air-brush. The spray pattern can be adjusted from ¾" (18.9 millimeters) to 2" (51 millimeters) by turning the paint tip. This model was designed for larger overall coverage as opposed to fine work and is ideal for fogging and blending, making textures, patterns, etc. . . .



SINGLE ACTION, EXTERNAL MIX

250-1 Basic Spray Gun Kit contains:
air-brush with ¾ oz. jar attached, propel regulator, 6 ft. light weigh vinyl air-hose, extra ¾ oz. paint jar with cover and instruction booklet

250-4 Mini-Spray Gun Kit contains:
air-brush with 4 oz. jar attached, propel regulator, 8 ft. light weig vinyl air-hose, propel can and instruction booklet.

PROPEL is Badger's own superior brand of propellant. Compounded for more even pressure, this formula lasts longer (by actual test) than previous conventional propellants.





Badger heavy duty braided air hose available in 10 foot (3.05 millimeters) length. recommended for use with any air system.



¼" (6.4 millimeters) pipe thread fitting adaptor (adapts air-hose to compressor or Co_2 tank)

Badger Model 180-1 Portable oil-less diaphragm type compressor is a "bleeder" type that develops 25 PSI at 1.0 CFM. Compact, lightweight and quiet, can be carried from room to room.



BAD62001	BADGER #200-1 AIR-BRUSH KIT	29.95	23.95
BAD62003	BADGER #200-3 DELUXE KIT	39.95	31.95
BAD62100	BADGER CAN OF PROPEL 11 OZ.	2.80	2.65
BAD62150	BADGER #150-IL POSTER AIRBRUSH	59.95	47.95
BAD62200	BADGER #180-1 COMPRESSOR	85.00	67.95
BAD62351	BADGER #350-1 AIR-BRUSH KIT	19.95	16.95
BAD62353	BADGER #350-3 DELUXE KIT	29.95	23.95
BAD62501	BADGER #250-1 STANDARD KIT	9.95	8.95
BAD62504	BADGER #250-4 MINI SPRAY KIT	12.50	10.95
BAD62811	BADGER #50-011 10 FT. AIR HOSE	4.50	4.25
BAD62823	BADGER #50-023 PIPE THREAD FIL	1.50	1.40

Balsarite is a crystal clear liquid that makes balsawood watertight. You probably don't realize it, but many times when Monokote sags and comes unglued, it's because the balsa is drying out, contracting, and pulling away from the Monokote.

Balsarite helps eliminate this frustrating problem.

As a matter of fact, it performs the same trick for Solarfilm & nearly every other covering. What's more, it makes all iron-ons stick better due to its deep wood penetration.

As for model boats and seaplanes, it's a must. Bet you didn't know that Balsarite (and Coverite) went to the Olympics and won a silver medal in rowing. The boat's deck was covered with both of these products.



COVERITE

Coverite GLASKOTE is a clear liquid that goes over any painted surface and produces a high gloss finish that is fuel resistant. No mixing, no short pot life, and almost no odor with this convenient brush or spray one step finish. It is compatible with all paints (epoxies, urethanes, butyrates, nitrates, enamels, lacquers, etc.). One final coat of Glaskote over your favorite brand of paint will transform it to a beautiful high gloss. Use Glaskote thinner to achieve desired consistancy.

COV60000	COVERITE BALSARITE 8 OZ	2.95	2.85
COV61008	COVERITE GLASKOTE 1/2 PT.	2.95	2.80
COV61016	COVERITE GLASKOTE THINNER 1 PT	2.55	2.15





PAINT & CATALYST

The easiest to apply and most durable EPOXY PAINT AVAILABLE— The "Ultimate Finish"

A development of the space age, Super Poxy Paint is formulated exclusively for models . . . mix and use (NO WAITING TIME — NO HAND RUBBING). Fast curing. Quick drying. Sets up rapidly. Minimum dust adherence. Stays glossy longer. Least affected by ultra-violet sun rays or manufactured fuels.

11 BASIC COLORS

— SPRAY OR BRUSH —

Red • Blue • Yellow • Orange • White • Black • Aluminum • Metallic Green • Metallic Blue • Metallic Red • our own K & B Purple • All above packed in ¼ Pt. or ½ Pt. cans plus **22 ADDITIONAL COLORS** available by mixing.

K & B SUPERPOXY

K&B68110	SUPERPOXY 8 OZ 8110 CLEAR	3.00	2.90
K&B68111	SUPERPOXY 8 OZ 8111 WHITE	3.00	2.90
K&B68112	SUPERPOXY 8 OZ 8112 INT ORANGE	3.00	2.90
K&B68113	SUPERPOXY 8 OZ 8113 RED	3.00	2.90
K&B68114	SUPERPOXY 8 OZ 8114 BLACK	3.00	2.90
K&B68115	SUPERPOXY 8 OZ 8115 BLUE	3.00	2.90
K&B68116	SUPERPOXY 8 OZ 8116 YELLOW	3.00	2.90
K&B68117	SUPERPOXY 8 OZ 8117 PRIMER	2.95	2.85
K&B68118	SPXY 8 OZ 8118 SPRAY GLOSS CAT	3.00	2.90
K&B68119	SUPERPOXY 8 OZ 8119 PRIMER CAT	2.95	2.85
K&B68120	SUPERPOXY PINT 8120 THINNER	2.95	2.85
K&B68121	SUPERPOXY QUART 8121 THINNER	4.50	4.30
K&B68123	SPXY 8 OZ 8123 SPRAY SATIN CAT	3.00	2.90
K&B68126	SUPERPOXY 8 OZ 8126 METL GREEN	3.00	2.90
K&B68127	SUPERPOXY 8 OZ 8127 METL BLUE	3.00	2.90
K&B68129	SPXY 8 OZ 8129 BRUSH GLOSS CAT	3.00	2.90
K&B68131	SPXY 8 OZ 8131 BRUSH SATIN CAT	3.00	2.90
K&B68132	SUPERPOXY 8 OZ 8132 PURPLE	3.00	2.90
K&B68134	SUPERPOXY 8 OZ 8134 MET. RED	3.00	2.90
K&B68136	SUPERPOXY 8 OZ 8136 ALUMINUM	3.00	2.90
K&B68150	SUPERPOXY POLYESTER RESIN 1 QT	7.50	6.95
K&B68160	K&B #8160 FIB CLOTH LT 3/4 OZ.	3.75	3.65
K&B68161	K&B #8161 FIB CLOTH MED 2 OZ.	3.75	3.65
K&B68162	K&B #8162 FIB CLOTH HEV 6 OZ.	3.75	3.65
K&B68163	K&B MICRO-BALLOONS 2.45 OZ	1.80	1.70
K&B68172	K&B MEASURING/MIXING CUPS - 24	1.50	1.40
K&B68999	SUPERPOXY COLOR MIXING CHART	.50	.45

CATALYSTS	• CLEAR • PRIMER	• THINNER
• SPRAYING—Satin or Gloss—¼ Pt. or ½ Pt. • BRUSHING—Satin or Gloss—¼ Pt. or ½ Pt.	• PRIMER CATALYST ½ Pt. only	For use with K & B SUPER POXY—Pints or Quarts



K & B FIBERGLAS —for covering

The highest quality, toughest weave—fiberglass available. For use with polyester or epoxy resin. Excellent contouring qualities make it easy to apply to compound curves.

Available in 3 weights — 38" wide — LIGHT ¾ OZ. CLOTH. For all wood airplanes—cover 100%.

MEDIUM 2 OZ. CLOTH. For increasing structural strength around fillets, nose, or interior of plane.

HEAVY 6 OZ. CLOTH. For joining wings or molding your own parts.



K & B SUPER POXY RESIN—for sealing and applying glass cloth

Created to include all the characteristics desirable in a resin and its application.

Easily workable: Requires minimum sanding. Little, if any, clogging of sandpaper. Curing time adjustable by the amount of catalyst.

Durable: Does not become brittle

1 QT. CAN (including catalyst)



K & B Micro-Balloons FILLER—

Mixed with K & B Resin is perfect for fillets or filling in defects (or repairing later damage). Sands beautifully to a smooth, strong hard finish.

1 OZ. CARTON



K & B MEASURING/MIXING CUPS

Twenty-four one ounce, unbreakable plastic cups. Epoxy resin and most model and craft cements will not adhere. Accurately graduated, from milliliters to fluid ounces.

Cat. No. 8172. 24 to Package

MIDWEST

STYROMATE



Now you can get a beautiful, tough finish on your foam airplane with this unique, new sealer. It provides a protective skin to the foam, yet adds little weight. StyroMate brushes on easily and fills the pores thoroughly. It drys in 4 to 6 hours. And the sealer has a unique color change indicating when it is dry. Then all you do is sand off the excess. StyroMate sands easily. StyroMate is easy to touch up. For best results, mix Midwest's new StyroMate thinner with the sealer and give it a final wash coat. Neither the thinner nor the sealer attack foam. Now it's ready for your favorite urethane or epoxy spray finish. The StyroMate set is safe, too. It's fuel proof, non-toxic when dry and virtually odorless.

MID31016	MIDWEST STYROMATE 16 OZ.	6.50	5.95
MID31108	MIDWEST STYROMATE THINNER 8 OZ	2.50	2.25

PRATHER

PHENOLIC MICRO-BALLOONS



Unlike any other filler Micro-Balloons becomes a strong part of the material being filled. It can even be used to repair tips of wings, stabs, or rudders with no additional balsa needed. It also makes strong fillets that will not crack. Phenolic Micro-Balloons has incredible strength. It is light and easy to sand. Not all Micro-Balloons are PHENOLIC. Ask for Phenolic Micro-Balloon Filler.

PRA21020	PRATHER #102 MICRO BALLOONS	1.98	1.90

HOBBYPOXY HOW-TO'S

These excellent "How-To's" are brought to you courtesy of HobbyPoxy Products. Read through them for some very helpful tips and techniques. If you would like even more information on painting pointers then write for HobbyPoxy's excellent brochure. Use a "Tower Action Post Card" (see P-291) and ask for "HobbyPoxy Painting Pointers." Send the request to: HobbyPoxy Products, Division of Pettit Paint Co., 36 Pine St.-Dept. Tower, Rockaway, N.J. 07866.

A HOBBYPOXY HOW-TO:

PREPARING WOOD FOR PAINT

The key to a good paint job is proper preparation. All surfaces must be smooth and clean.

Let's look at smooth first: Wood has grain, and sometimes nicks and dents, and maybe knots and worm holes. For filling it's best to select a material that's just slightly softer than the wood itself. That way, you can sand the filler smooth without digging ditches in the surrounding surface. First seal the wood with a coat of Hobbypoxy Clear. Let it dry. Fill any dents with Hobbypoxy Stuff straight out of the can, let it dry, then sand it smooth. For grain filling I recommend Stuff, Hobbypoxy Filler, or Hobbypoxy Undercoater White. Stuff, thinned to brushing consistency with Hobbypoxy Thinner, goes on easy, sands easy, and fills fast. But it's pretty soft. Filler is a little harder to sand, but results in a harder surface. Undercoater White is a true two-part epoxy and gives the best results, but takes more time. Stuff and Filler are perfect for balsa models, while Undercoater White works great on plywood.

The secret to grain filling is not how much filler you put on, but how much you sand off. Generally speaking, you should sand the first couple of coats right down to the bare wood. This leaves the filler only in the low spots — which is precisely what you want. Follow this with one more coat, sanded smooth, and you should be ready for the top coat.

Now to the clean part: Before you paint you should remove all dust, oily fingerprints and other bad things from the surface. A careful vacuuming, followed by a gentle wipe-down with cheesecloth dampened with thinner will do the job nicely. Don't use paper towels—they leave lint. Once it's clean, avoid handling the model too much. Now paint, using Hobbypoxy (preferably) or any other product. All Hobbypoxy filler materials, once completely dry or cured, are compatible with dope, epoxy, enamel and other model paints.

For more info, send for a free copy of "Poxy Painting Pointers"

A HOBBYPOXY HOW-TO:

HOW TO FINISH FOAM

We use a lot of foam in our models nowadays — for wings, fuselages, boat hulls — and the best way to protect and strengthen the surface and prepare it for paint is to coat it with Hobbypoxy Formula 2 Epoxy Glue.

Begin by sanding off any rough spots and mold marks on the foam. While you're doing this, place the two tubes of Formula 2 near a gentle heat source — like a light bulb, or on a piece of wood placed on a radiator, or in front of a hot air register — in order to warm the tubes to bring the epoxy to a less viscous consistency. This will allow you to brush it out smoother when you apply it to the foam. When you're finished sanding, vacuum the foam to remove all dust.

I suggest you buy a couple of inexpensive 1" paint brushes at the hardware store (not camel hair brushes from the hobby shop!) and cut the bristles to about ½" length. This will result in a somewhat stiff-bristled brush which is perfect for applying the glue.

Now mix equal parts of Part A and Part B in a clean tin can, plastic cup or other convenient container (not a waxed paper cup!), and brush it onto the foam as smoothly and evenly as possible. Go for a thin even coat, not for heavy coverage. When you've covered the entire surface, set it aside over night. Clean the brush in Hobbypoxy Thinner, followed with soap and water, and you'll be able to use it again.

After the glue has cured, sand it lightly with fine silicon carbide or aluminum oxide sandpaper, then vacuum it. Clean the surface with a rag dampened in alcohol, let it dry, then apply a second coat of Formula 2.

When this coat has cured, check to see that you have full unbroken coverage. Sand it smooth, and check again for bare spots. Cover any bare foam with another coat of glue. Fill any nicks or dents with Hobbypoxy Stuff and sand smooth.

All this will take only a couple of evenings, and will produce a tough, fuel proof skin on your foam structure. Two or three coats of Hobbypoxy Enamel will finish the job in high style.

A HOBBYPOXY HOW-TO:

WHAT'S A MICRO BALLOON?

I guess most of you have heard of micro balloons, have read about them in construction articles, and seen them advertised — but do you know what they are? Well, they're just what their name implies — microscopic hollow spheres made of glass or a phenolic plastic material. Because they're hollow, they don't weigh very much, and since their diameters are measured in millionths of an inch, they can be used to thicken epoxy and polyester resins without making them lumpy or grainy. The result is that you can use micro balloons to make a putty that's perfect for fillets and filling dents — it's incredibly strong, yet it's as light as balsa.

When using micro balloons with epoxy glues, measure out the correct proportions of glue first, but don't mix them together! Put each portion in a suitable container and add the same amount of balloons to each part. The higher the balloon content, the lighter the weight — with only a slight loss of strength. The reason for adding balloons to both Part A and Part B of the glue is to make them easier to mix together later, and also to establish the viscosity of the final mix beforehand. If you use two sealable cans or jars, you can keep the unmixed putty indefinitely — using it as you need it — but the resin/balloon ratio of each part should be as close to identical as possible to allow you to measure out equal parts for proper mixing proportions.

Obviously, you can mix balloons with any of our epoxy glue formulas, but probably the most useful will be Formula 4 for quick-setting patches and dent filling, and Formula 2 for a longer working time when making fillets, setting sailboat keels, and the like.

When you apply the epoxy putty, smooth it as much as possible before it cures. Although it's light, it's quite hard, and not too easy to sand — especially when applied to balsa. When making fillets you can do a nicejob of shaping and smoothing by using a finger, dipped in water. After it's cured, a light sanding followed by a couple of coats of Hobbypoxy Filler or Stuff will produce a smooth surface ready for paint.

A HOBBYPOXY HOW-TO:

PREPARING FIBERGLASS FOR PAINT

At first glance it might seem that fiberglass is a snap to paint —especially compared to wood. Fiberglass is smooth, has no grain to fill, isn't porous...what could be easier? But then why is it that paint peels off sometimes, or doesn't dry properly, or cracks after a while? The answer is poor preparation.

The first thing to do with your fiberglass fuselage or hull is to wash it down with Hobbypoxy Thinner to remove mold release, paraffin and other contaminants, then lightly sand it to a "frosty" appearance. Use reasonably fine aluminum oxide or silicon carbide paper, and sand until all the shine is gone. But don't sand so hard that you cut through the resin and into the glass fibers!

Now clean it again with Hobbypoxy Thinner. Inspect the surface by holding it up to the light. Do you see any cloth texture? Pinholes? Dents or ripples? If not, you're very lucky. For the rest of you who aren't so lucky, we have a few products to help you out.

Fill pinholes with Hobbypoxy Stuff, let dry, and sand smooth. For bad dents or ripples, use Hobbypoxy Quick Prep polyester resin and micro balloons, or Hobbypoxy Formula 2 Glue. Apply, let cure, and sand smooth.

For filling and smoothing cloth texture, and as an excellent primer even on smooth fiberglass, a coat or two of Hobbypoxy Undercoater White will provide a perfect base for your paint job. Here's a little trick we suggest: mix it two parts "Part A" to one part "Part B" and it'll cure faster and sand even easier. If you want, you can brush it on, since brush marks will be sanded out anyway.

Before painting, you should vacuum the inside as well as the outside, then tape up all openings where you don't want the paint to go. This is especially important when spraying because spray blowing into cavities blows back onto the wet paint, depositing overspray and dust.

For the full story on good painting technique, send for a copy of "Hobbypoxy Painting Pointers". It's free.

HOBBYPOXY

DO THE HOBBYPOXY TWO-STEP

The easy way to a "Standoff Finish"*



1. Brush on a coat of Hobbypoxy color.

2. Brush on another coat of Hobbypoxy color.

Okay, okay, it's not really that simple, but almost! You should sand the balsa before step one, then let the paint dry thoroughly and sand it before step two. Will you settle for the Hobbypoxy four-step?

Seriously, this method will give you a tougher, more flexible, more fuel proof, super-shinier finish than a half-dozen coats of dope will. Cheaper and quicker, too. It's ideal for the weekend flyer who's in a hurry to get in the air, and will have his dope-happy buddies eating their hearts out.

brush or spray a flawless finish

You can brush or spray a flat or gloss finish with any Hobbypoxy color just by mixing it with the proper Hobbypoxy Hardener.

● H-02 Gloss, the good old reliable all-purpose hardener. It's perfect for brushing because it cures just slow enough to allow the brush marks to flow out. It's also very good for spraying for the same reason . . . orange peel flows out, leaving a glass smooth surface.

● H-06 Quick-Spray is the hardener to use if you've got dust problems in your shop. Although it takes the same time as the other hardeners to cure completely, it dries dust-free in just a few minutes, keeping dog hairs and balsa dust from ruining your finish. We don't recommend using Quick-Spray for brushing, except for very small trim areas.

● H-05 Flat Hardener is *the* thing for military scale models. It's so flat you won't believe it. In fact, some guys mix a little gloss hardener in with it to get a more realistic sheen on their scale jobs. Flat dries dust-free even faster than Quick-Spray, and really should be sprayed, although brushing is possible.

FILLER. A tough air-drying compound designed to fill wood grain, Filler gives a hard base for Hobbypoxy's high-gloss finish. Thinned as directed and flowed on smoothly, Filler is easy to sand.

STUFF. A fine-grained air-drying repair and filling material. Use it as it comes from the can for filling small nicks and pinholes. Thin to brushing or spraying consistency for an easy-to-sand filler. Not as strong as FILLER, but good for low stress areas.

WHITE UNDERCOATER. A two-part-mix filler and primer, to be mixed with H-02 or H-06 hardeners. Superior adhesion to wood, metal, plastic. Does not shrink, remains flexible, produces the toughest base for HOBBYPOXY enamels. Can be brushed or sprayed, easy to sand with wet-or-dry used wet. Because it's so highly pigmented, it covers well and fills fast. Two coats should do it.

HOBBYPOXY ENAMELS. Two coats will give you a super-shiny, fuelproof, waterproof, abrasion-resistant finish that stays flexible and won't chip, peel, or crack. Hobbypoxy enamels can be brushed or sprayed, and when mixed with the proper hardeners will produce high-gloss or flat finishes. METALLIC COLORS are now available by adding HOBBYPOXY CUSTOM METALIZER to any standard color.

HOBBYPOXY THINNER. For thinning and reducing all Hobbypoxy finishing products, and for general cleanup. Hobbypoxy T..inner is the only reducing agent for use with Hobbypoxy enamels.

HOB60802	HOBBYPOXY 8 OZ H-02 GLOSS 'B'	2.50	2.30
HOB60805	HOBBYPOXY 8 OZ H-05 FLAT 'B'	2.50	2.30
HOB60806	HOBBYPOXY 8 OZ H-06 SPRGLS 'B'	2.50	2.30
HOB60808	HOBBYPOXY 8 OZ H-08 CLEAR	2.50	2.30
HOB60810	HOBBYPOXY 8 OZ H-10 WHITE	2.50	2.30
HOB60819	HOBBYPOXY 8 OZ H-19 UNDERCOAT	2.50	2.30
HOB60824	HOBBYPOXY 8 OZ H-24 DARK BLUE	2.50	2.30
HOB60826	HOBBYPOXY 8 OZ H-26 LIGHT BLUE	2.50	2.30
HOB60833	HOBBYPOXY 8 OZ H-33 STIN GREEN	2.50	2.30
HOB60847	HOBBYPOXY 8 OZ H-47 BR. YELLOW	2.50	2.30
HOB60849	HOBBYPOXY 8 OZ H-49 CUB YELLOW	2.50	2.30
HOB60850	HOBBYPOXY 8 OZ H-50 STUFF	1.50	1.40
HOB60856	HOBBYPOXY 8 OZ H-56 INT ORANGE	2.50	2.30
HOB60865	HOBBYPOXY 8 OZ H-65 BRIGHT RED	2.50	2.30
HOB60866	HOBBYPOXY 8 OZ H-66 DARK RED	2.50	2.30
HOB60870	HOBBYPOXY 8 OZ H-70 GRAY	2.50	2.30
HOB60881	HOBBYPOXY 8 OZ H-81 BLACK	2.50	2.30
HOB60890	HOBBYPOXY 8 OZ H-90 FILLER	1.20	1.10
HOB60893	HOBBYPOXY 8 OZ H-93 SILVER	2.50	2.30
HOB60899	HOBBYPOXY 8 OZ H-99 METALIZER	2.50	2.30
HOB61607	HOBBYPOXY PINT H-07 THINNER	1.75	1.55
HOB61690	HOBBYPOXY PINT H-90 FILLER	2.00	1.80
HOB63207	HOBBYPOXY QUART H-07 THINNER	2.75	2.55
HOB63280	HOBBYPOXY QUART H-80 RESIN	5.25	4.75
HOB69000	HOBBYPOXY TAC RAG	.55	.50

MILLER



AB-100 shading brush kit



MODEL 2000 AIR COMPRESSOR

Precision built genuine piston type Air Compressor with finely machined aluminum cylinder and close tolerance piston as the heart of this rugged unit. The V-belt drive is powered by a powerful ⅛ H.P. 110V motor (220V motor available). The Miller Air Compressor is designed to maintain a continuous .6 CFM flow of air at 20-25 lbs. pressure. Self lubricated bronze bearings are used throughout to give maintenance free use.

COMPLETE SPRAYING SETS

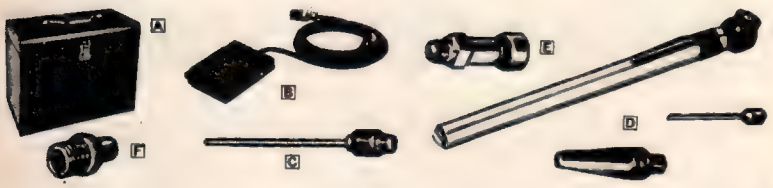
2134 Complete handyman/hobbyist spray set including air compressor, 12 ft. hose, 18G pressure type (internal mix) gun, 16G siphon type (external mix) gun, 14G air brush, air chuck and football needle.

2018 Spray set including air compressor, air hose, 18G pressure type (internal mix) spray gun complete with round and fan nozzles, air chuck and football needle.

2017 Spray set including air compressor, air hose, 16G siphon type (external mix) spray gun and 14G air brush, air chuck and football needle.

2016 Spray set including air compressor, air hose, 16G siphon type (external mix) spray gun complete with fine and coarse nozzles, air chuck and football needle.

2011 Spray set including air compressor, air hose and AB100 air brush kit complete with open and fine nozzles, air chuck and football needle.



MLL62000	MILLER #2000 COMPRESSOR	63.95	47.95
MLL62016	MILLER #2016 SPRAY SET	68.95	51.70
MLL62017	MILLER #2017 SPRAY SET	73.95	55.45
MLL62018	MILLER #2018 SPRAY SET	73.95	55.45
MLL62020	MILLER #2011 SPRAY SET (20SB)	68.95	51.70
MLL62040	MILLER #9040 METAL STORAGE BOX	16.95	14.40
MLL62060	MILLER #9060 FOOT SWITCH	16.95	14.40
MLL62085	MILLER #9080 INFLATOR KIT	4.25	3.15
MLL62090	MILLER #9090 ADJ. PRESS. VALVE	4.25	4.00
MLL62091	MILLER #9091 HOSE ADAPTOR	2.25	2.15
MLL62100	MILLER #AB-100 BRUSH KIT	8.50	7.20
MLL62134	MILLER #2134 SPRAY SET	84.95	63.70
MLL62140	MILLER #14G SPRAY GUN	7.50	6.35
MLL62160	MILLER #16G SPRAY GUN	9.50	7.90
MLL62180	MILLER #18G SPRAY GUN	15.95	13.50
MLL62381	MILLER #1380 AIR HOSE	4.25	4.15

A Model 9040 — Metal storage and carrying case—for air compressor, hose and spray gun.

B Model 9060 — 110/220V foot control switch—provides easy remote control operation of compressor; allows operator to turn unit on or off as required.

C Model 9070 — Air gun—handy for blowing dust off of objects to be painted. Also used by ceramacists to remove the mold from green ceramic ware.

D Model 9080 — Inflater kit—Equips your basic paint spraying air compressor for these other common chores: blowing out pipes—inflating toys—inflating tires—inflating air mattresses—inflating footballs, basketballs, etc.—recharging air chamber (well water system). The inflater kit has air chuck, football needle and tire gauge.

E Model 9090 — Adjustable relief valve—used with commercial air brushes to regulate maximum air pressure.

F Model 9091 — 1/4″ pipe thread adapter—adapts compressor to commercial air brush hoses.

NO. 1380 AIR HOSE for use with AB100 Air Brush or with AB200 Air Brush where compressor is equipped with adjustable relief valve. Individually packaged.



MODEL NO. 18-G

Pressure type (internal mix) spray gun

Designed for spraying of heavy bodied, slow drying materials; enamel, latex paint, varnish, etc. Comes with Round and Fan nozzles for general purpose spraying.



MODEL NO. 16-G

Siphon type (external mix) spray gun

Designed for light bodied, quick drying materials; lacquer, airplane dope, ceramic finishes, shellac, color photo finish coating, shoe dye, fabric treatment, moth proofing, water repellent, insecticide, garden & tree spray, bug repellent, detergents. Includes Open and Fine spray nozzles.

MODEL AB100 AIR BRUSH

A 4 piece bleeder type air brush kit that includes the air brush with fine spray nozzle with 2½ oz. material jar, coarse spray nozzle and 2 material storage jars. Operates from Miller No. 2000 Air Compressor or other comparable air supply. Cannot be used with aerosol propellant.



MODEL NO. 14-G

Siphon type (external mix) air brush

Designed for small delicate spraying of the above materials; art work, photo shading, model finishing, ceramic finishing, floral effects, bakery decoration, furniture touch-up, automobile touch-up. Airbrush equipped with Open and Fine spray nozzles.

Formula-U

POLYURETHANE

FUEL PROOF FINISH FOR GAS POWERED MODELS



CHARACTERISTICS: Designed to withstand the rugged treatment gas powered models must endure.

- TOUGH, LIGHTWEIGHT, MAR-RESISTANT FINISH
- FUEL PROOF—NOT AFFECTED BY WATER, CHEMICALS OR ALCOHOL AND WITHSTANDS RACING FUELS UP TO 50% NITRO METHANE
- ONE-COMPONENT SYSTEM—REQUIRES NO CATALYST
- LOW ODOR
- QUICK DRYING—DUST FREE IN 45 MINUTES, DRIES HARD IN 4 HOURS
- WILL NOT WRINKLE OR LIFT WHEN RECOATED
- FREE OF LEAD HAZARDS—NON-TOXIC WHEN DRY
- SPRAY CONTAINS NO FLUOROCARBON PROPELLENTS
- BRUSHES EASILY WITHOUT BRUSH MARKS



APPLICATIONS: Applies to any paintable surface. Since Formula-U does not shrink silkspan or silk products, it is recommended that Aero-Gloss Flat or Gloss Clear be applied first, then topcoated with Formula-U. Brushing Formula-U can be thinned for spray gun application. Colors can be mixed. Use Formula-U Thinner for thinning and clean-up.

SIZES: 4 oz. Jar, ½ pint Can, 12 oz. Spray Can.



COLORS: Brushing and Spray in choice of Hi-Gloss, Metallic and Flat. *Perfectly match 12 Solarfilm colors.

- *RAVEN BLACK
- *POLAR WHITE
- *DARK RED
- *AVIATION YELLOW
- *MIDNITE BLUE
- JUNGLE GREEN
- *FIERY ORANGE
- *FLIGHT ALUMINUM
- *BRIGHT RED
- *TROPIC BLUE
- *METALLIC RED
- *METALLIC GREEN
- *METALLIC GOLD
- FLAT OLIVE DRAB
- FLAT CAMOUFLAGE TAN
- FLAT BLACK
- FLAT WHITE
- CLEAR

PAC60090	FORMULA U 20090 8 OZ BLACK	2.79	2.60
PAC60091	FORMULA U 20091 8 OZ WHITE	2.79	2.60
PAC60092	FORMULA U 20092 8 OZ DK RED	2.79	2.60
PAC60093	FORMULA U 20093 8 OZ YELLOW	2.79	2.60
PAC60094	FORMULA U 20094 8 OZ DK BLUE	2.79	2.60
PAC60095	FORMULA U 20095 8 OZ GREEN	2.79	2.60
PAC60096	FORMULA U 20096 8 OZ ORANGE	2.79	2.60
PAC60097	FORMULA U 20097 8 OZ ALUMINUM	2.79	2.60
PAC60098	FORMULA U 20098 8 OZ BRT RED	2.79	2.60
PAC60099	FORMULA U 20099 8 OZ LT BLUE	2.79	2.60
PAC60100	FORMULA U 20100 8 OZ MET RED	2.79	2.60
PAC60101	FORMULA U 20101 8 OZ MET GREEN	2.79	2.60
PAC60102	FORMULA U 20102 8 OZ MET GOLD	2.79	2.60
PAC60103	FORMULA U 20103 8 OZ FL. O.D.	2.79	2.60
PAC60104	FORMULA U 20104 8 OZ FL. TAN	2.79	2.60
PAC60105	FORMULA U 20105 8 OZ FL. BLACK	2.79	2.60
PAC60106	FORMULA U 20106 8 OZ FL. WHITE	2.79	2.60
PAC60107	FORMULA U 20107 8 OZ CLEAR	2.79	2.60
PAC60110	FORM U 20110 12 OZ SP BLACK	2.89	2.70
PAC60111	FORM U 20111 12 OZ SP WHITE	2.89	2.70
PAC60112	FORM U 20112 12 OZ SP DK RED	2.89	2.70
PAC60113	FORM U 20113 12 OZ SP YELLOW	2.89	2.70
PAC60114	FORM U 20114 12 OZ SP DK BLUE	2.89	2.70
PAC60115	FORM U 20115 12 OZ SP GREEN	2.89	2.70
PAC60116	FORM U 20116 12 OZ SP ORANGE	2.89	2.70
PAC60117	FORM U 20117 12 OZ SP ALUMINUM	2.89	2.70
PAC60118	FORM U 20118 12 OZ SP BR RED	2.89	2.70
PAC60119	FORM U 20119 12 OZ SP LT BLUE	2.89	2.70
PAC60120	FORM U 20120 12 OZ SP MET RED	2.89	2.70
PAC60121	FORM U 20121 12 OZ SP MET GRN	2.89	2.70
PAC60122	FORM U 20122 12 OZ SP MET GOLD	2.89	2.70
PAC60123	FORM U 20123 12 OZ SP FL O.D.	2.89	2.70
PAC60124	FORM U 20124 12 OZ SP FL TAN	2.89	2.70
PAC60125	FORM U 20125 12 OZ SP FL BLACK	2.89	2.70
PAC60126	FORM U 20126 12 OZ SP FL WHITE	2.89	2.70
PAC60127	FORM U 20127 12 OZ SP CLEAR	2.89	2.70
PAC60130	FORM U 20130 THINNER 1/2 PT.	1.59	1.50
PAC60131	FORM U 20131 THINNER 1 PT.	2.39	2.25
PAC63004	AEROGLOSS 30-4 FLAT BLACK	1.10	1.05
PAC63104	AEROGLOSS 31-4 FLAT WHITE	1.10	1.05
PAC63204	AEROGLOSS 32-4 FLAT NAVY BLUE	1.10	1.05
PAC63304	AEROGLOSS 33-4 FLAT AERO BLUE	1.10	1.05
PAC63404	AEROGLOSS 34-4 FLAT OLIVE DRAB	1.10	1.05
PAC63504	AEROGLOSS 35-4 FLAT STORM GRAY	1.10	1.05
PAC63604	AEROGLOSS 36-4 FLAT CLOUD GRAY	1.10	1.05

PACTRA Aero-Gloss



hot fuel proof dope

In fact, over 36 colors... in both hi-gloss and flat finishes. You can choose brush or spray in eight convenient sizes. BUT the colors are not the whole story. For over 26 years Pactra's Aero-Gloss Dope has been used by more "Award Winning" modelers than any other brand. WHY? DEPENDABILITY. A consistently durable hot fuel proof finish that holds up under the rugged handling a flying model must endure. Aero-Gloss looks good when you put it on, and stays looking good... that's a pretty important story for your pride and joy!

In the Aerogloss descriptions below the first two digits are the color number and the number after the dash is the size: 4=4 oz. can, 8=8 oz. can, 16=16 oz. can, and 16S=16 oz. spray can.

PAC63704	AEROGLOSS 37-4 FLAT CRMT GREEN	1.10	1.05
PAC63804	AEROGLOSS 38-4 FLAT LGHT EARTH	1.10	1.05
PAC63904	AEROGLOSS 39-4 FLAT DARK EARTH	1.10	1.05
PAC64004	AEROGLOSS 40-4 FLAT CLEAR	1.10	1.05
PAC64308	AEROGLOSS THINNER 8 OZ.	1.55	1.50
PAC64316	AEROGLOSS THINNER 16 OZ.	2.35	2.25
PAC64332	AEROGLOSS THINNER 32 OZ.	3.75	3.55
PAC65008	AEROGLOSS 50-8 SILVAIRE ALUM	1.99	1.90
PAC65061	AEROGLOSS 50-16S SILVAIRE ALUM	2.59	2.45
PAC65108	AEROGLOSS 51-8 CUB YELLOW	1.99	1.90
PAC65161	AEROGLOSS 51-16S CUB YELLOW	2.59	2.45
PAC65208	AEROGLOSS 52-8 CUB ORANGE	1.99	1.90
PAC65261	AEROGLOSS 52-16S CUB ORANGE	2.59	2.45
PAC65308	AEROGLOSS 53-8 STEARMAN RED	1.99	1.90
PAC65361	AEROGLOSS 53-16S STEARMAN RED	2.59	2.45
PAC65408	AEROGLOSS 54-8 FOKKER RED	1.99	1.90
PAC65461	AEROGLOSS 54-16S FOKKER RED	2.59	2.45
PAC65704	AEROGLOSS 57-4 CESSNA GREEN	1.10	1.05
PAC65808	AEROGLOSS 58-8 STINSON GREEN	1.99	1.90
PAC65861	AEROGLOSS 58-16S STINSON GREEN	2.59	2.45
PAC65908	AEROGLOSS 59-8 CESSNA GRAY	1.99	1.90
PAC66108	AEROGLOSS 61-8 CURTIS BLUE	1.99	1.90
PAC66161	AEROGLOSS 61-16S CURTISS BLUE	2.59	2.45
PAC66208	AEROGLOSS 62-8 CORSAIR BLUE	1.99	1.90
PAC66261	AEROGLOSS 62-16S CORSAIR BLUE	2.59	2.45
PAC66308	AEROGLOSS 63-8 JET BLACK	1.99	1.90
PAC66361	AEROGLOSS 63-16S JET BLACK	2.59	2.45
PAC66408	AEROGLOSS 64-8 SWIFT WHITE	1.99	1.90
PAC66416	AEROGLOSS 64-16 SWIFT WHITE	3.29	3.15
PAC66461	AEROGLOSS 64-16S SWIFT WHITE	2.59	2.45
PAC66532	AEROGLOSS 65-32 CLEAR	5.25	4.95
PAC66561	AEROGLOSS 65-16S CLEAR	2.59	2.45
PAC66604	AEROGLOSS 66-4 ARMY OLIVE DRAB	1.10	1.05
PAC67008	AEROGLOSS 70-8 BALSA FILLER PAT	1.99	1.90
PAC67108	AEROGLOSS 71-8 SANDING SEALER	1.99	1.90
PAC67208	AEROGLOSS 72-8 BONANZA BLUE	1.99	1.90
PAC67408	AEROGLOSS 74-8 ROYAL PURPLE	1.99	1.90
PAC67504	AEROGLOSS 75-4 CAMOUFLAGE TAN	1.10	1.05
PAC68004	AEROGLOSS 80-4 METALLIC MAROON	1.10	1.05
PAC68108	AEROGLOSS 81-8 METALLIC BLUE	1.99	1.90
PAC68161	AEROGLOSS 81-16S METALLIC BLUE	2.59	2.45
PAC68204	AEROGLOSS 82-4 METALLIC GREEN	1.10	1.05
PAC68704	AEROGLOSS 87-4 FUEL PROOFER	1.10	1.05
PAC68761	AERO LOSS 87-16S FUEL PROOFER	2.59	2.45
PAC68861	AEROGLOSS 88-16S CANDY RED	2.59	2.45
PAC68961	AEROGLOSS 89-16S CANDY ORANGE	2.59	2.45
PAC69061	AEROGLOSS 90-16S CANDY PURPLE	2.59	2.45
PAC69161	AEROGLOSS 91-16S CANDY YELLOW	2.59	2.45
PAC69261	AEROGLOSS 92-16S UNDRCOAT GOLD	2.59	2.45

PAINT & PAINTING ACCESSORIES



PERFECT GLOSSY

R&S

- Fuel-Proof
- Mar Resistant
- Dries to Touch in 6-8 Hours
- Excellent Flow
- Excellent Adhesion
- Dust Free ½ Hour
- Covers Most Hobby Sealers
- Does Not Affect Styrofoam
- Virtually Odorless
- Will Not Blush

For Perfect results use with:
PERFECT THINNER
$2.20 pt. $3.20 qt.
with "Easy-Pour Spout



PERFECT CAMOUFLAGE

Mirror-Finish Perfect Paint Available in Spray & Regular Cans

"Perfect" paint will give a professional finish to new ready-to-fly aircraft or brighten up old models.

Authentic USAAF, RAF, RCAF, German, Japanese, Israel & Egyptian Camouflage Colors

Make your warbirds really authentic! These camouflage paints duplicate almost perfectly the colors used on warbirds from World War II to the Israel War.

R+S60100	R+S SPONGE BRUSH 1 IN. WIDE	.40	.35
R+S60200	R+S SPONGE BRUSH 2 IN. WIDE	.60	.55
R+S60801	R+S PAINT 8 OZ RED #P-01	2.99	2.90
R+S60802	R+S PAINT 8 OZ LIGHT BLUE P-02	2.99	2.90
R+S60803	R+S PAINT 8 OZ ROYAL BLUE P-03	2.99	2.90
R+S60804	R+S PAINT 8 OZ YELLOW #P-04	2.99	2.90
R+S60805	R+S PAINT 8 OZ ORANGE #P-05	2.99	2.90
R+S60806	R+S PAINT 8 OZ LT. GREEN #P-06	2.99	2.90
R+S60807	R+S PAINT 8 OZ SPR GREEN #P-07	2.99	2.90
R+S60808	R+S PAINT 8 OZ PURPLE #P-08	2.99	2.90
R+S60809	R+S PAINT 8 OZ BLACK #P-09	2.99	2.90
R+S60810	R+S PAINT 8 OZ WHITE #P-10	2.99	2.90
R+S60811	R+S PAINT 8 OZ ALUMINUM #P-11	2.99	2.90
R+S60812	R+S PAINT 8 OZ FLAT BLACK P-12	2.99	2.90
R+S60813	R+S PAINT 8 OZ FLAT WHITE P-13	2.99	2.90
R+S60814	R+S PAINT 8 OZ CLEAR #P-14	2.99	2.90
R+S60815	R+S PAINT 8 OZ FLAT SATIN P-15	2.99	2.90
R+S60816	R+S PAINT 8 OZ GRAY #P-16	2.99	2.90
R+S60831	R+S PC-31 8 OZ TAN	3.49	3.35
R+S60832	R+S PC-32 8 OZ MIDDLESTONE	3.49	3.35
R+S60833	R+S PC-33 8 OZ DARK EARTH	3.49	3.35
R+S60834	R+S PC-34 8 OZ LT. BLUE	3.49	3.35
R+S60835	R+S PC-35 8 OZ ASURE BLUE	3.49	3.35
R+S60836	R+S PC-36 8 OZ GREY	3.49	3.35
R+S60837	R+S PC-37 8 OZ NUT GREY	3.49	3.35
R+S60838	R+S PC-38 8 OZ LT SL GRAY	3.49	3.35
R+S60839	R+S PC-39 8 OZ DK SL GRAY	3.49	3.35
R+S60840	R+S PC-40 8 OZ DARK GREEN	3.49	3.35
R+S60841	R+S PC-41 8 OZ NAVY GREEN	3.49	3.35
R+S60842	R+S PC-42 8 OZ OLIVE DRAB	3.49	3.35
R+S60843	R+S PC-43 8 OZ FLAT CLEAR	3.49	3.35
R+S60844	R+S PC-44 8 OZ SEA BLUE	3.49	3.35
R+S60845	R+S PC-45 8 OZ INTERNATNL BLUE	3.49	3.35

R+S61201	R+S 12 OZ SPRAY #P-01 RED	3.79	3.60
R+S61202	R+S 12 OZ SPRAY #P-02 LT BLUE	3.79	3.60
R+S61203	R+S 12 OZ SPRAY #P-03 RYL BLUE	3.79	3.60
R+S61204	R+S 12 OZ SPRAY #P-04 YELLOW	3.79	3.60
R+S61205	R+S 12 OZ SPRAY #P-05 ORANGE	3.79	3.60
R+S61206	R+S 12 OZ SPRAY #P-06 LT GREEN	3.79	3.60
R+S61207	R+S 12 OZ SPRAY #P-07 SP GREEN	3.79	3.60
R+S61208	R+S 12 OZ SPRAY #P-08 PURPLE	3.79	3.60
R+S61209	R+S 12 OZ SPRAY #P-09 BLACK	3.79	3.60
R+S61210	R+S 12 OZ SPRAY #P-10 WHITE	3.79	3.60
R+S61211	R+S 12 OZ SPRAY #P-11 ALUMINUM	3.79	3.60
R+S61212	R+S 12 OZ SPRAY #P-12 FL BLACK	3.79	3.60
R+S61213	R+S 12 OZ SPRAY #P-13 FL WHITE	3.79	3.60
R+S61214	R+S 12 OZ SPRAY #P-14 CLEAR	3.79	3.60
R+S61215	R+S 12 OZ SPRAY #P-15 FL SATIN	3.79	3.60
R+S61216	R+S 12 OZ SPRAY #P-16 GRAY	3.79	3.60
R+S61231	R+S 12 OZ SPRAY #PC-31 TAN	3.99	3.80
R+S61232	R+S 12 OZ SPRAY #PC-32 MIDLSTN	3.99	3.80
R+S61233	R+S 12 OZ SPRAY PC-33 DK EARTH	3.99	3.80
R+S61234	R+S 12 OZ SPRAY PC-34 LT BLUE	3.99	3.80
R+S61235	R+S 12 OZ SPRAY PC-35 AZUR BLU	3.99	3.80
R+S61236	R+S 12 OZ SPRAY PC-36 GREY	3.99	3.80
R+S61237	R+S 12 OZ SPRAY PC-37 NUT GREY	3.99	3.80
R+S61238	R+S 12 OZ SPRAY PC-38 LT GREY	3.99	3.80
R+S61239	R+S 12 OZ SPRAY PC-39 DK GREY	3.99	3.80
R+S61240	R+S 12 OZ SPRAY PC-40 DK GREEN	3.99	3.80
R+S61241	R+S 12 OZ SPRAY PC-41 NAVY GRN	3.99	3.80
R+S61242	R+S 12 OZ SPRAY PC-42 OLIV DRB	3.99	3.80
R+S61243	R+S 12 OZ SPRAY PC-43 FL CLEAR	3.99	3.80
R+S61244	R+S 12 OZ SPRAY PC-44 SEA BLUE	3.99	3.80
R+S61245	R+S 12 OZ SPRAY PC-45 INT BLUE	3.99	3.80
R+S61600	R+S PAINT THINNER PINT	2.20	2.10
R+S63200	R+S PAINT THINNER QUART	3.20	2.90

SIMMONS



ARTIST BRUSH SET #SIM69825
features point tipped good quality red sable brushes. Great for detail and line work. Set of 3.

ALL PURPOSE BRUSH SET #SIM69855
Features an assortment of 5 brushes. Thes flat and round ended brushes are great for painting, brushing and many other general uses.

SIM69025	SIMMONS 1/4'' CAMEL HAIR BRUSH	.70	.65
SIM69050	SIMMONS 1/2'' CAMEL HAIR BRUSH	.95	.90
SIM69075	SIMMONS 3/4'' CAMEL HAIR BRUSH	1.55	1.45
SIM69100	SIMMONS 1'' CAMEL HAIR BRUSH	2.10	2.00
SIM69825	SIMMONS ARTIST BRUSH SET	2.25	2.00
SIM69855	SIMMONS ALL PURPOSE BRUSH SET	1.55	1.45



SOUTHERN R/C

FLEX-ALL

A plasticizer for acrylic lacquer and primer and butyrate dope. In acrylic it completely eliminates cracking and spiderwebbing. Also aids in gloss retention. In dope, it helps reduce shrinking. One bottle is enough for use on several airplanes.

4 oz. bottle **#SRC39201**

SRC39201	SOUTHERN RC FLEX-ALL	1.95	1.75

Propellers and Accessories

The propeller is the device that transfers the power of the engine into the thrust needed to pull the plane through the air. Because of this, it is a very important part of your plane, yet it is too often neglected as a last-minute item. The propeller is very often chosen with little care. You just pick-up a box of props and mount them one-by-one on the plane. This does not guarantee you good performance, especially if you demand it.

The propellers, as they are made today, are probably the best that can be made within our current market restrictions. A perfect prop would probably cost several dollars per sample, and, at the rate they are broken in use, this cost is prohibitive. While the props we now get are good, there are a few things that can be done in order to make them better for our purposes.

You've heard this many times in the modeling press, but you should invest in a prop balancer, and balance each of your props. This will result in a better-running engine, longer radio life, and a plane that will tend to keep together. All of this comes from the fact that a balanced prop will cut down vibration, which detracts from all aspects of performance. We carry two such propeller balancers, and while you can find proponents who will argue the relative merits of both, they are really both good products that do a good job of balancing a prop.

When you balance a prop, you can paint the light blade or shave the heavy one. A combination of both is best. When you shave a blade, shave the top side. The top side of the prop is the side that is *AWAY* from the engine when it is mounted in a normal fashion on to the engine.

Any kind of prop can be balanced. You just trim a little off of the heavy blade. The material of the prop is important when trimming it. If you are trying to trim a wood prop, you can use a knife, saw or even sandpaper. A nylon prop is a different matter. I have found that the easiest way to trim a prop is by cutting it a little bit at the tips. This way you can keep the diameter as constant as possible.

For the ultimate in performance modification, you can make sure the pitch of your prop is where you want it. Use the Prather Prop Pitch Gauge for this. It comes with complete instructions, and will tell you how to modify your props all the way to a complete re-pitching!

PROP SELECTION CHART

ENGINE SIZE	RECOMMENDED PROP SIZES
.049 - .051	6 x 3, 6 x 4
.09 - .10	7 x 3, 7 x 4
.15	8 x 4, 8 x 5, 8 x 6
.19 - .25	9 x 5, 9 x 6
.29	10 x 5, 10 x 6
.30 - .35	10 x 6, 10 x 7
.40	10 x 6, 10 x 7, 10 x 8
.45 - .51	11 x 5, 11 x 6
.60 - .61	11 x 7, 7¼, 7½, 7¾, 8, 8¼
.71 - .80	12 x 4 through 14 x 6

COX

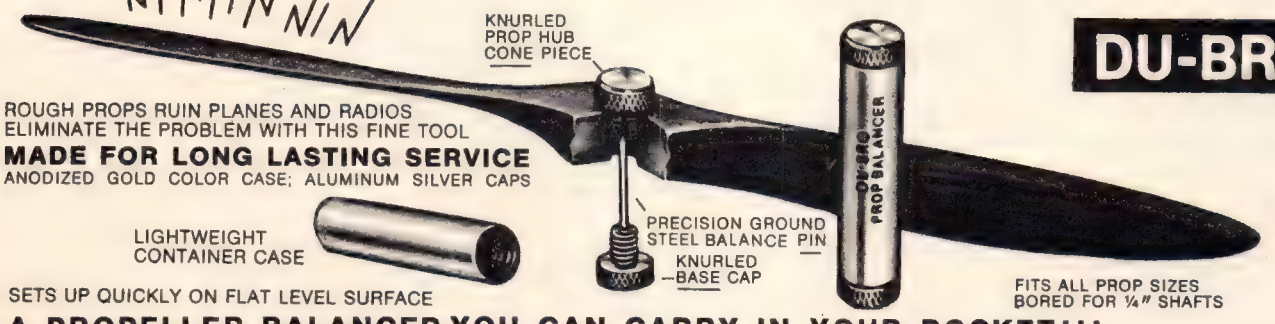


Cox nylon props are strong filled nylon that retain shape and pitch at high speeds. The 3" dia. size is for .010 engines, 4" dia. for .020's, 5" dia. for .049's, 6" dia. for .049's and .051's, 7" dia. for .09's, and the 8" dia. is for .15's.

COX17241	COX 241 NYLON PROP 4-1/2X2	.75	.70
COX17242	COX 242 NYLON PROP 5X3	.75	.70
COX17243	COX 243 NYLON PROP 5-1/2X4	.75	.70
COX17244	COX 244 NYLON PROP 6X3	.75	.70
COX17245	COX 245 NYLON PROP 6X4	.75	.70
COX17247	COX 247 NYLON PROP 3X1-1/4	.75	.70

DUB20160 DUBRO 160 PROP BALANCER 2.95 2.65

DU-BRO



ROUGH PROPS RUIN PLANES AND RADIOS
ELIMINATE THE PROBLEM WITH THIS FINE TOOL

MADE FOR LONG LASTING SERVICE

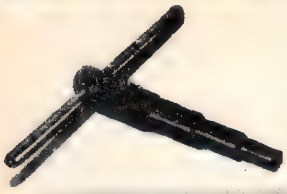
ANODIZED GOLD COLOR CASE; ALUMINUM SILVER CAPS

SETS UP QUICKLY ON FLAT LEVEL SURFACE

FITS ALL PROP SIZES
BORED FOR ¼" SHAFTS

A PROPELLER BALANCER YOU CAN CARRY IN YOUR POCKET!!!

THREE PIECES OF CAREFULLY MACHINED AIRCRAFT ALUMINUM PARTS CONTAINED WITHIN A SMALL CYLINDER 7/16" X 2 1/16" . . . SHOWS BALANCE ON LONG AND SIDE AXIS . . . EXCLUSIVE FEATURES



FOX

PROP REAMERS

Quite often the propeller that you want to use will have a hole smaller than the shaft size on the motor you want to use it with. The Fox Reamers are designed to provide an easy, and accurate method of enlarging the hole to the next standard size shaft size without danger of splitting the propeller or getting the hole out of center. We offer two reamers - a standard reamer which would be used for 95% of applications and a KB Special, which makes a step from ¼ inch to ⅜ in the peculiar manner that that particular engine requires. All Fox Reamers are of standard four-flute design and are fitted with a T-bar. They can be carried right in your tool box and used on the field. These are a must for the tool box of every serious modeler. The standard model has progressive steps of from 3/16 to ¼ to 5/16 and finally ⅜. The KB model has a quarter inch pilot and cuts to ⅜.

Fox 4 Step Reamer 70201
Fox KB Reamer 70202

FOX18201	FOX #70201 PROP REAMER 4-STEP	5.95	5.45
FOX18202	FOX #70202 PROP REAMER K&B	5.95	5.45

REV-UP



Rev-Up Props are precision crafted, superbly finished, and completely fuel proofed hard maple props. They are extra high performance for those who want that little competitive edge. Available in the Pro Series which is a conventional blade cut for sport and pattern.

REV17140	REV-UP PROP 'PRO' (1) 9X4	1.39	1.35
REV17142	REV-UP PROP 'PRO' (1) 9X6	1.39	1.35
REV17146	REV-UP PROP 'PRO' (1) 9X7	1.39	1.35
REV17152	REV-UP PROP 'PRO' (1) 10X6	1.49	1.45
REV17153	REV-UP PROP 'PRO' (1) 10X6W	1.49	1.45
REV17154	REV-UP PROP 'PRO' (1) 10X6EW	1.59	1.55
REV17162	REV-UP PROP 'PRO' (1) 11X6	1.59	1.55
REV17166	REV-UP PROP 'PRO' (1) 11X7	1.59	1.55
REV17167	REV-UP PROP 'PRO' (1) 11X7.5	1.59	1.55
REV17168	REV-UP PROP 'PRO' (1) 11X7.75	1.59	1.55
REV17169	REV-UP PROP 'PRO' (1) 11X8	1.59	1.55

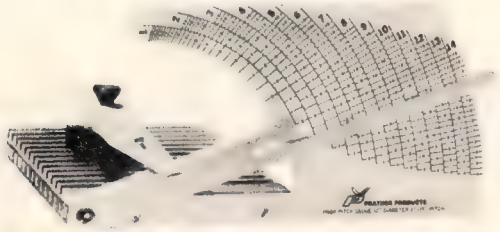
PRATHER

Prop Pitch Gauge

PRECISION MADE

FITS UP TO 12″ DIA. PROPS.
FROM 3″ TO 15″ OF PITCH

* **MORE RPM**
* **MORE POWER**



If you use a prop you need a prop pitch gauge. Not all props are true, one blade can be pitched different than the other blade.

You can true up both blades using the prop pitch gauge. You can also change the pitch of your prop to get maximum performance out of your prop and engine.

Complete instructions on how to use the prop pitch gauge are included, plus tips on how to get the best performance out of your prop and engine by Terry Prather.

"USED BY THE NATIONS TOP MODELERS"

PROP BALANCER



- **Accurate**
- **No Flat Surface Needed**
- **Tapered Cones Center Prop of Shaft**
- **Fits Most Props for Engines .049 up**

PRA21010	PRATHER #101 PROP BALANCER	1.98	1.90
PRA21200	PRATHER #120 PROP PITCH GAUGE	/32.95	26.50

GRISH BROS.

Grish Bros. offers three kinds of props. All new to their line is the super size wood props that are great on the 1/4 scale ships with large engines or gear reducers. Then there is the famous Tornado nylon prop that once had the distinct yellow color but now is a natural white color. They are still one of the finest polyester props made. NOTE—do NOT boil Tornado props anymore or color them. And last is the 3 blade prop—offered in three sizes and both tractor and pusher (backward from normal).

GRI17022	GRISH WOOD PROP 18X6	7.00	6.30
GRI17024	GRISH WOOD PROP 18X8	7.00	6.30
GRI17026	GRISH WOOD PROP 18X10	7.00	6.30
GRI17042	GRISH WOOD PROP 20X6	8.00	7.20
GRI17044	GRISH WOOD PROP 20X8	8.00	7.20
GRI17046	GRISH WOOD PROP 20X10	8.00	7.20
GRI17062	GRISH WOOD PROP 22X6	10.00	9.00
GRI17064	GRISH WOOD PROP 22X8	10.00	9.00
GRI17066	GRISH WOOD PROP 22X10	10.00	9.00
GRI17082	GRISH WOOD PROP 24X6	13.00	11.70
GRI17084	GRISH WOOD PROP 24X8	13.00	11.70
GRI17086	GRISH WOOD PROP 24X10	13.00	11.70
GRI17113	TORNADO PROP 1 ONLY 5X3	.30	.27
GRI17114	TORNADO PROP 1 ONLY 5X4	.30	.27
GRI17123	TORNADO PROP 1 ONLY 5-1/2X3	.30	.27
GRI17124	TORNADO PROP 1 ONLY 5-1/2X4	.30	.27
GRI17133	TORNADO PROP 1 ONLY 6X3	.35	.33
GRI17134	TORNADO PROP 1 ONLY 6X4	.35	.33
GRI17144	TORNADO PROP 1 ONLY 7X4	.50	.47
GRI17146	TORNADO PROP 1 ONLY 7X6	.50	.47
GRI17148	TORNADO PROP 1 ONLY 7X8	.50	.47
GRI17154	TORNADO PROP 1 ONLY 8X4	.65	.60
GRI17156	TORNADO PROP 1 ONLY 8X6	.65	.60
GRI17158	TORNADO PROP 1 ONLY 8X8	.65	.60
GRI17164	TORNADO PROP 1 ONLY 9X4	.85	.80
GRI17166	TORNADO PROP 1 ONLY 9X6	.85	.80
GRI17167	TORNADO PROP 1 ONLY 9X7	.85	.80
GRI17168	TORNADO PROP 1 ONLY 9X8	.85	.80
GRI17174	TORNADO PROP 1 ONLY 10X4	.85	.80
GRI17176	TORNADO PROP 1 ONLY 10X6	.85	.80
GRI17184	TORNADO PROP 1 ONLY 11X4	1.00	.90
GRI17186	TORNADO PROP 1 ONLY 11X6	1.00	.90
GRI17188	TORNADO PROP 1 ONLY 11X8	1.00	.90
GRI17194	TORNADO PROP 1 ONLY 12X4	1.50	1.35
GRI17195	TORNADO PROP 1 ONLY 12X5	1.50	1.35
GRI17196	TORNADO PROP 1 ONLY 12X6	1.50	1.35
GRI17233	TORNADO PROP 3 BLADE 6X3 TRAC	.50	.45
GRI17274	TORNADO PROP 3 BLADE 10X4 TRAC	1.50	1.40
GRI17276	TORNADO PROP 3 BLADE 10X6 TRAC	1.50	1.40
GRI17333	TORNADO PROP 3 BLADE 6X3 PUSH	.50	.45
GRI17376	TORNADO PROP 3 BLADE 10X6 PUSH	1.50	1.40
GRI17403	TORNADO PROP 6X3 PUSHER	.35	.33
GRI17404	TORNADO PROP 6X4 PUSHER	.35	.33
GRI17426	TORNADO PROP 8X6 PUSHER	.85	.80
GRI17446	TORNADO PROP 9X6 PUSHER	1.00	.90
GRI17456	TORNADO PROP 10X6 PUSHER	1.00	.90

TOP FLITE

Top Flite regular wood props are no longer being made — Top Flite says the supply of wood for those props became too variable and erratic. But the Super-M (super maple) are still available in both the standard blade and in the power prop blade. Also available is a full line-up of white nylon props.

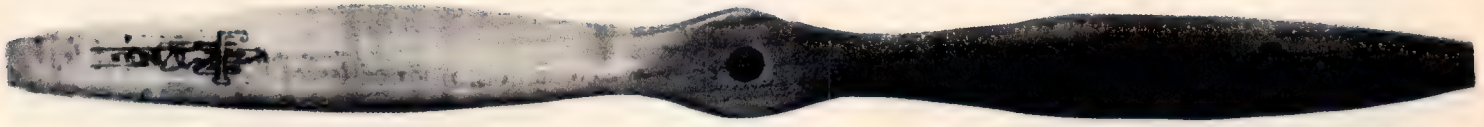
SUPER-M PROPS from ROCK HARD MAPLE

Rock hard maple is *hard . . . hard* enough to reduce vibration to a minimum . . . *hard* enough to let you tighten down the prop nut so it won't come lose . . . *hard* enough to make it last longer than other woods and even nylon, particularly when flying from a field covered with tall grass and stiff weeds which have a tendency to chip and splinter most wood, and nick nylon props.

And . . . as you would expect . . . every Super M Prop has been expertly developed and designed, precision made and properly balanced to deliver maximum thrust.

TOP17345	T.F. PROP SUPER-M 1 ONLY 9X6	1.05	1.00
TOP17355	T.F. PROP SUPER-M 1 ONLY 10X6	1.15	1.10
TOP17365	T.F. PROP SUPER-M 1 ONLY 11X6	1.30	1.25
TOP17366	T.F. PROP SUPER-M 1 ONLY 11X7	1.30	1.25
TOP17368	T.F. PROP SUPER-M 1 ONLY 11X8	1.30	1.25
TOP17375	T.F. PROP SUPER-M 1 ONLY 12X6	1.45	1.40
TOP17395	T.F. PROP SUPER-M 1 ONLY 14X6	1.80	1.75
TOP17400	T.F. PROP SUPER-M 1 ONLY 16X4	5.95	5.05
TOP17402	T.F. PROP SUPER-M 1 ONLY 16X6	5.95	5.05
TOP17404	T.F. PROP SUPER-M 1 ONLY 18X6	6.95	5.90
TOP17406	T.F. PROP SUPER-M 1 ONLY 18X8	6.95	5.90
TOP17408	T.F. PROP SUPER-M 1 ONLY 18X10	6.95	5.90
TOP17410	T.F. PROP SUPER-M 1 ONLY-20X6	7.95	6.75
TOP17412	T.F. PROP SUPER-M 1 ONLY-20X8	7.95	6.75
TOP17414	T.F. PROP SUPER-M 1 ONLY-20X10	7.95	6.75
TOP17445	T.F. PROPS SUPER-M DOZEN 9X6	12.60	10.10
TOP17455	T.F. PROPS SUPER-M DOZEN 10X6	13.80	11.00
TOP17465	T.F. PROPS SUPER-M DOZEN 11X6	15.60	12.50
TOP17466	T.F. PROPS SUPER-M DOZEN 11X7	15.60	12.50
TOP17468	T.F. PROPS SUPER-M DOZEN 11X8	15.60	12.50
TOP17475	T.F. PROPS SUPER-M DOZEN 12X6	17.40	13.90
TOP17495	T.F. PROPS SUPER-M DOZEN 14X6	21.60	17.25
TOP17501	T.F. PROP NYLON 1 ONLY 5-1/4X3	.40	.35
TOP17503	T.F. PROP NYLON 1 ONLY 5-1/4X4	.40	.35
TOP17511	T.F. PROP NYLON 1 ONLY 6X3	.45	.40
TOP17513	T.F. PROP NYLON 1 ONLY 6X4	.45	.40
TOP17523	T.F. PROP NYLON 1 ONLY 7X4	.65	.60
TOP17533	T.F. PROP NYLON 1 ONLY 8X4	.80	.75
TOP17535	T.F. PROP NYLON 1 ONLY 8X6	.80	.75
TOP17543	T.F. PROP NYLON 1 ONLY 9X4	1.10	1.05
TOP17545	T.F. PROP NYLON 1 ONLY 9X6	1.10	1.05
TOP17546	T.F. PROP NYLON 1 ONLY 9X7	1.10	1.05
TOP17552	T.F. PROP NYLON 1 ONLY 10X3.5	1.20	1.15
TOP17555	T.F. PROP NYLON 1 ONLY 10X6	1.20	1.15
TOP17565	T.F. PROP NYLON 1 ONLY 11X6	1.35	1.30
TOP17566	T.F. PROP NYLON 1 ONLY 11X7	1.35	1.30
TOP17568	T.F. PROP NYLON 1 ONLY 11X8	1.35	1.30
TOP17575	T.F. PROP NYLON 1 ONLY 12X6	1.60	1.55
TOP17645	T.F. PROP POWER SM (1) 9X6	1.05	1.00
TOP17655	T.F. PROP POWER SM (1) 10X6	1.15	1.10
TOP17665	T.F. PROP POWER SM (1) 11X6	1.30	1.25
TOP17666	T.F. PROP POWER SM (1) 11X7	1.30	1.25
TOP17667	T.F. PROP POWER SM (1) 11X7.5	1.30	1.25
TOP17668	T.F. PROP POWER SM (1) 11X7.75	1.30	1.25
TOP17669	T.F. PROP POWER SM (1) 11X8	1.30	1.25
TOP17675	T.F. PROP POWER SM (1) 12X6	1.45	1.40
TOP17745	T.F. PROPS PWR SM (12) 9X6	12.60	10.10
TOP17755	T.F. PROPS PWR SM (12) 10X6	13.80	11.05
TOP17765	T.F. PROPS PWR SM (12) 11X6	15.60	12.50
TOP17766	T.F. PROPS PWR SM (12) 11X7	15.60	12.50
TOP17767	T.F. PROPS PWR SM (12) 11X7.5	15.60	12.50
TOP17768	T.F. PROPS PWR SM (12) 11X7.75	15.60	12.50
TOP17769	T.F. PROPS PWR SM (12) 11X8	15.60	12.50
TOP17775	T.F. PROPS PWR SM (12) 12X6	17.40	13.90

ZINGER



OUR PROPELLORS ARE DESIGNED AND ENGINEERED FOR MAXIMUM THRUST AND EFFICIENCY.

ALL PROPS ARE TRUE PITCH AND EACH ONE IS BALANCED TWICE BEFORE PACKAGING.

ZIN17131	ZINGER PROP 1 ONLY 7X4	1.20	1.15
ZIN17132	ZINGER PROP 1 ONLY 7X5	1.20	1.15
ZIN17133	ZINGER PROP 1 ONLY 7X6	1.20	1.15
ZIN17141	ZINGER PROP 1 ONLY 8X4	1.30	1.25
ZIN17142	ZINGER PROP 1 ONLY 8X5	1.30	1.25
ZIN17143	ZINGER PROP 1 ONLY 8X6	1.30	1.25
ZIN17151	ZINGER PROP 1 ONLY 9X4	1.30	1.25
ZIN17152	ZINGER PROP 1 ONLY 9X5	1.30	1.25
ZIN17153	ZINGER PROP 1 ONLY 9X6	1.30	1.25
ZIN17155	ZINGER PROP 1 ONLY 9X7	1.30	1.25
ZIN17161	ZINGER PROP 1 ONLY 10X4	1.40	1.35
ZIN17162	ZINGER PROP 1 ONLY 10X5	1.40	1.35
ZIN17163	ZINGER PROP 1 ONLY 10X6	1.40	1.35
ZIN17165	ZINGER PROP 1 ONLY 10X7	1.40	1.35
ZIN17173	ZINGER PROP 1 ONLY 11X6	1.60	1.55
ZIN17174	ZINGER PROP 1 ONLY 11X6W	1.60	1.55
ZIN17175	ZINGER PROP 1 ONLY 11X7	1.60	1.55
ZIN17176	ZINGER PROP 1 ONLY 11X7W	1.60	1.55
ZIN17177	ZINGER PROP 1 ONLY 11X7.5	1.60	1.55
ZIN17178	ZINGER PROP 1 ONLY 11X8	1.60	1.55
ZIN17631	ZINGER PROPS- 6 EACH - 7X4	7.20	6.15
ZIN17632	ZINGER PROPS- 6 EACH - 7X5	7.20	6.15
ZIN17633	ZINGER PROPS- 6 EACH - 7X6	7.20	6.15
ZIN17641	ZINGER PROPS- 6 EACH - 8X4	7.80	6.65
ZIN17642	ZINGER PROPS- 6 EACH - 8X5	7.80	6.65
ZIN17643	ZINGER PROPS- 6 EACH - 8X6	7.80	6.65
ZIN17651	ZINGER PROPS- 6 EACH - 9X4	7.80	6.65
ZIN17652	ZINGER PROPS- 6 EACH - 9X5	7.80	6.65
ZIN17653	ZINGER PROPS- 6 EACH - 9X6	7.80	6.65
ZIN17655	ZINGER PROPS- 6 EACH - 9X7	7.80	6.65
ZIN17661	ZINGER PROPS- 6 EACH - 10X4	8.40	7.15
ZIN17662	ZINGER PROPS- 6 EACH - 10X5	8.40	7.15
ZIN17663	ZINGER PROPS- 6 EACH - 10X6	8.40	7.15
ZIN17665	ZINGER PROPS- 6 EACH - 10X7	8.40	7.15
ZIN17673	ZINGER PROPS- 6 EACH - 11X6	9.60	8.15
ZIN17674	ZINGER PROPS- 6 EACH - 11X6W	9.60	8.15
ZIN17675	ZINGER PROPS- 6 EACH - 11X7	9.60	8.15
ZIN17676	ZINGER PROPS- 6 EACH - 11X7W	9.60	8.15
ZIN17677	ZINGER PROPS- 6 EACH - 11X7.5	9.60	8.15
ZIN17678	ZINGER PROPS- 6 EACH - 11X8	9.60	8.15

RETRACTABLE LANDING GEAR

Retracts

Ever since we have been building models of airplanes that had retractable landing gear, we've wanted our models to be able to "pick up their feet", too. It was not until about six or seven years ago that retracts were developed to the state they are now. The retracts available today are well-made, rugged, and most important, reliable. Since there is a vast selection of planes that will accept retracts, all you have to do is decide that you want a retractable, and you'll have no problem selecting one.

Today, there are two basic types of retract units available: the pneumatics, and the mechanicals. The pneumatics operate by using the pressure of a compressed gas, usually Freon, or simply, air. This gas is stored in an on-board storage tank which is connected to a four-way valve which is actuated by the retract servo. The valve is called "four-way" because there are four ways for the gas to exit the valve, depending on the position of the servo. When you wish to extend the gear, the valve releases the gas to flow out the "extend" lines, through pressure tubing, and into cylinders attached to the retract gear units. Inside the cylinder is a piston which is moved by the gas pressure, and in turn moves the gear to the extended position. When the gear is retracted, the gas no longer needed inside of the cylinder used during the "extend" cycle is vented overboard.

Of the retracts we carry, the Rom-air and the B&D retract systems are the only fully-pneumatic sets, and the Goldberg, Southern R/C, Sonic-Systems, and the Robart units are the mechanicals.

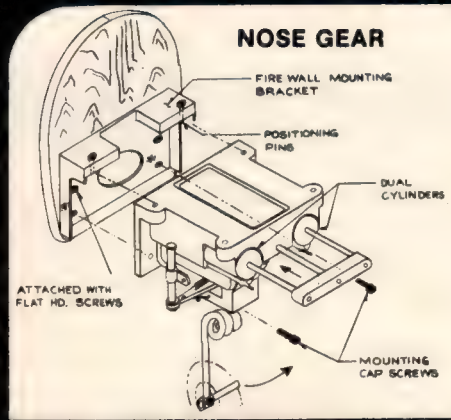
We also handle an interesting outfit by Sonic-Systems. It is their series of pneumatic actuators. These units convert the ordinary set of mechanical retract units to the pneumatic type by the addition of the actuation cylinders and their respective air lines, valve and storage tank.

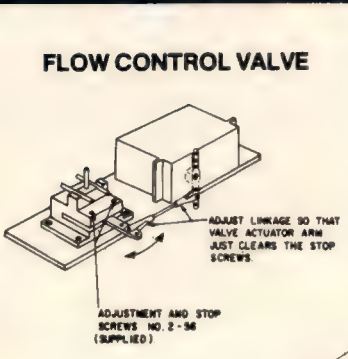
One of the innovators of the industry, Robart, has come up with two items that should be of interest to many modelers. The retractable tailwheel unit, and their new ½A retract units. The use of the tailwheel unit is just right for your scale combat ship, and will increase the possible flight points in competition because the plane will be just more realistic. The little gears are for all of those "little" ½A planes we see buzzing around nowdays. With the advent of the mini R/C systems, a full-blown ½A pattern or scale job is by no means unfeasible, especially with the new ½A carburetors

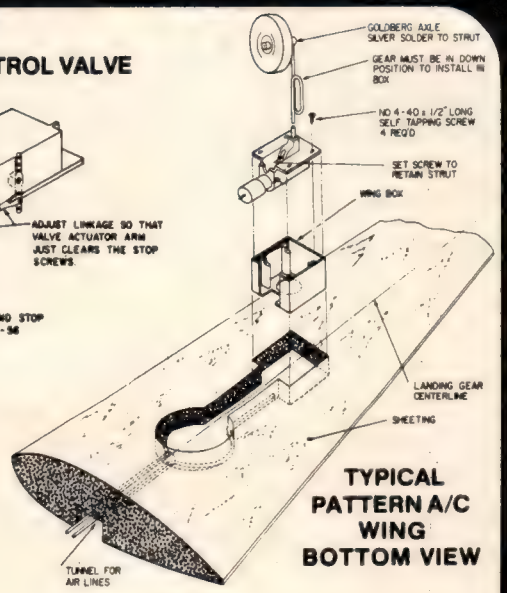
For those scale ships that require their legs to twist 90 degrees on retraction, Rom-Air and Robart have these items. The Rhom units come in two-gear and trike-gear outfits. The trike-gear outfit is especially suited for the Bridi Shrike Commander. The Robart units, while not yet available as this is being written, should come up to their usual high standards of quality and durability when they do come out.

B&D ENTERPRISES

Pneumatic Retracts







B & D Enterprises introduces a pneumatic landing gear system professionally manufactured of injection molded glass filled Delrin. Thorough flight testing has proven the system to be vibration resistant and long wearing. Up and down locks are mechanical while actuation is by air or freon via a flow control valve engineered to solve leakage and linkage problems. Gear struts are of highest quality spring steel with set screw flats ground for you. The nose gear unit may be firewall or belly mounted while molded mounting boxes ease the installation of the main units.

B&D22300 B&D PNEUMATIC RETRACTS-3 GEAR 89.95 71.95

GOLDBERG

WHAT EXPERTS SAY ABOUT CG RETRACTS



Jack Stafford: Based on reliability, we made CG Retracts our standard installation.



Dave Brown: 125 gals. of fuel and the gear has given no trouble of any kind.



Jim Grier: In 7 months of flying, your gear has never failed.



Walt Moucha: CG Retracts work like a fine watch—(and) can take hard use.



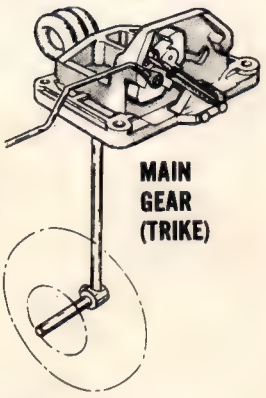
Jim Oddino: Your gear gives high performance at low cost — a rare achievement.



Bill Thomas: One ship has used 30 gals. of fuel, without landing gear malfunctions.



Bud Atkinson: 429 flights with Goldberg Retracts — and they'll easily go another 400.





TWIN GEAR Retracts–RG2
TRI-GEAR Retracts–RG3
NOSE GEAR (Only)–RG1

For years, experts were aware that retracts were great and really helped performance. The only problem was they were troublesome and expensive. More than 2 years ago CG Retracts arrived, and at unbelievably low cost. The question became, "How can they be any good at that price?" Now the answers are clear:

During this time, CG Retracts have proved their quality everywhere. They've been carrying 8 lbs. and up, over rough grass fields, with ease and reliability. Modelers report success with 9, 10, 11 and even 12 lb. ships! For long life and dependable performance, no wonder so many leaders prefer CG Retracts! No other retracts have such tremendous proof of acceptance.

CG Retracts stand up to a crash better than your airplane and radio — and far better than any retracts with sheet metal. No other retracts have such ruggedness.

CG Retracts have fewer parts, which means less to watch and maintain, less to go wrong and cause trouble. No other retracts have such simplicity.

CG Retracts have adjustable axles so you don't have to bend your own. And you get low overall height, and light weight. No other retracts have such versatility.



- **LOWEST PROFILE** — Main Gears 1" high.
- **LIGHTEST** — Nose Gear, 2 Mains and 3 Struts, only 6 oz.
- **BROADEST BASED** for best stress distribution.
- **TOUGH** — Rugged vibration absorbing nylon moldings. Large bearing surfaces.
- **SHORTEST TANK COMPARTMENT** — Nose Gear needs only 5½" to 6".
- **SIMPLEST** — Main Gear has only 3 molded parts.
- **EASY** — Installation or Strut Removal. Low actuating force — one retract servo can easily actuate all three units.
- **COST??** — Unbelievable! But True!

GBG22001	GOLDBERG RG1 RETRACT NOSE GEAR	10.00	8.00
GBG22002	GOLDBERG RG2 RETRACT TWIN-GEAR	14.95	10.50
GBG22003	GOLDBERG RG3 RETRACT TRI-GEAR	24.95	17.50
GBG22004	GOLDBERG RPS1 RETRACT POW SYST	29.95	21.95
GBG22006	GOLDBERG OUTPUT ARM FOR RPS-1	.65	.60

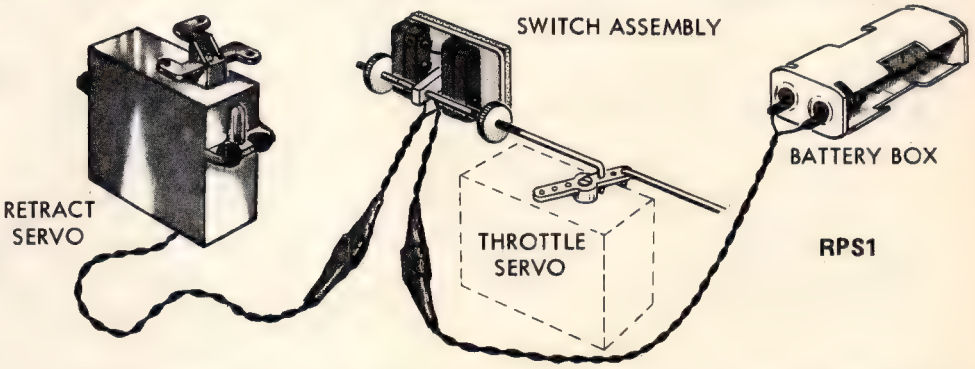
RETRACT POWER SYSTEM FOR 4-CHANNEL FLYERS!

POWERFUL NEW SERVO, SPECIAL SWITCHING SYSTEM AND 2-CELL BATTERY PACK— WIRED UP READY TO INSTALL. LIGHT! COMPACT!

At last! A way for 4-channel flyers to easily get into retracts! Our new Power System is ready to go - just add 2 penlite cells, mount the switch assembly on the side of the fuselage or on the throttle servo, connect the retracts and that's it! When throttle and trim levers are both moved all the way up or all the way down, the retracts will do the same!

Heart of the system is a small, powerful servo, geared down for heavy work, and with thick strong output gears. Transit time under load is about 3 seconds. Easily handles tri-gear retracts with power in reserve.

System comes wired up with plug connectors and needs only batteries. 2 nickel cads may be used, or penlite dry cells which are good for many hundreds of retract cycles when using a balanced system such as CG Retracts.



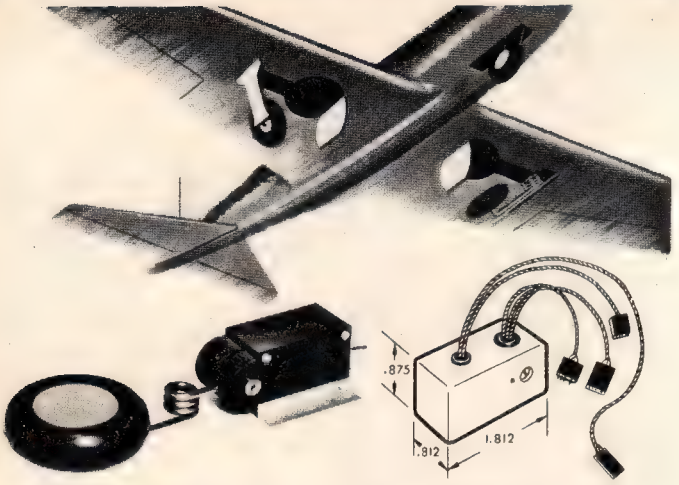
FLIGHT PROCEDURE 1. Take off using throttle stick fully advanced in normal manner. After take off, advance trim lever to limit, and gears will retract.

2. Leaving trim at maximum, perform flight maneuvers as usual, retarding and advancing main throttle stick as desired. Even with full retard, gears will remain retracted.

3. On preparing to land, first bring trim to full retard. When ready, retard throttle stick fully and hold for 3 seconds so gears will extend and lock. If necessary to add throttle to lengthen approach, gears will remain extended.

Complete system weight with batteries (not furnished) - 3 oz.

RETRACTABLE LANDING GEAR



- RUGGED AND LIGHT
- POSITIVE LOCKING
- SELF-CONTAINED
- VERY SIMPLE TO INSTALL
- EXTRA SERVOS OR BATTERY PACKS ARE NOT REQUIRED

KRAFT

Simplicity of installation and long trouble-free life are the keynotes of the KRAFT retractable landing gear system. Molded from high strength glass fiber reinforced nylon, it is virtually indestructible and fuel proof. Because it is self-contained, complicated actuating linkages and extra servos are avoided. The units can be mounted either vertically or horizontally. Gear legs are removable and may be bent to the desired length. The positive locking mechanism is the most positive and strongest available.

Specially designed amplifiers permit direct operation from the receiver without the necessity of extra batteries. The system may even be operated from a four channel receiver if desired.

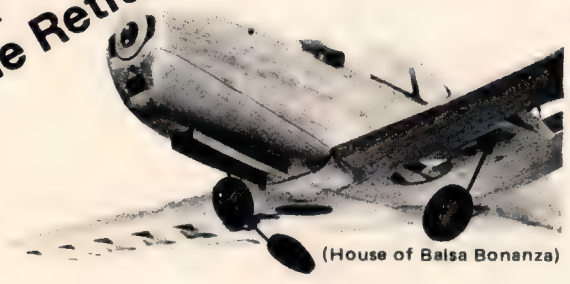
Landing gears are furnished completely wired with connectors. Since extra servos are not required, the system is very competitive in price with the less satisfactory mechanical units.

Complete System (wired with LG52 Amplifier)
Part No. 700-007

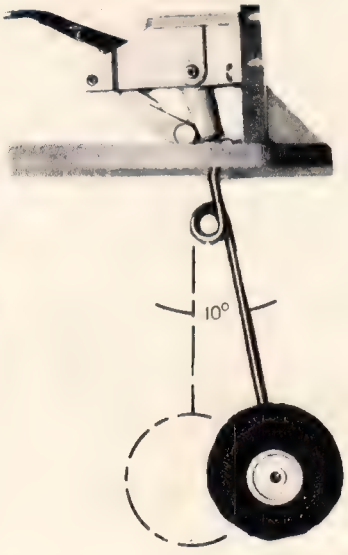
KRA22007	KRAFT 700-007 RETRT W/LG52 AMP	109.95	94.95

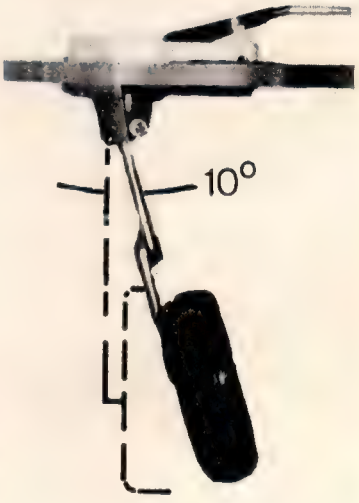
ROBART

NEW
1/2A Scale Retracts



(House of Balsa Bonanza)

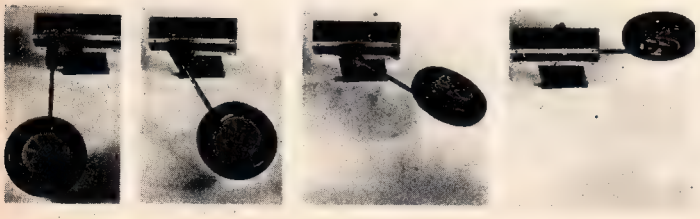




- VARIABLE GEOMETRY FEATURE (80° RETRACTION FOR FOCKE WULF–190, 110° FOR P39 NOSE GEAR, 90° FOR NORMAL SET UP)
- SCALE DRAG LINK MECHANISM
- FITS POPULAR 1/2A KITS
- PULL UP FEATURE ELIMINATES BENDING PUSH RODS

Rotating Retracts

- 90° SCALE ROTATION FOR CORSAIR, P40, HELLCAT, AERO COMMANDER ETC.
- SCALE DRAG LINK MECHANISM
- AIR CYLINDER OR SERVO RETRACTION
- .40/.60 Size



Scale Retractable Tailwheel

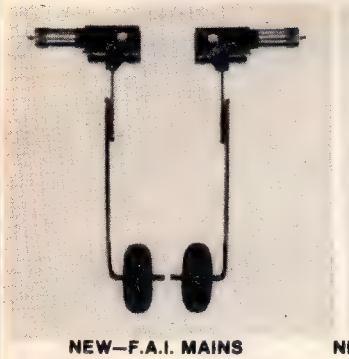


SCALE APPEARANCE
FOR ALL SCALE APPLICATIONS P40, P47, P51, CORSAIR ETC
STEERABLE
OPERATES FROM CONVENTIONAL RETRACT SERVOS OR AIR CYLINDERS
SELF LOCKING DOWN
(WHEEL NOT INCLUDED)

ROB22002	ROBART 1/2 A RETRACT MAIN GEAR	16.95	13.55
ROB22003	ROBART 1/2 A RETRACT TRI GEAR	25.95	20.75
ROB22090	ROBART 90 DEG ROT. RETRACTS(2)	49.95	37.50
ROB26000	ROBART RETRACTABLE TAILWHEEL	9.95	7.95

RHOM PRODUCTS

When you think retracts... THINK ROM AIR



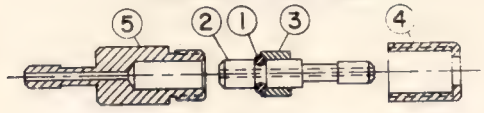
NEW—F.A.I. MAINS
Cylinders outboard—not reversible



NEW—MAINS FOR PLATT FW 190-D9
with 3/16" preformed struts.

THREADED COUPLING

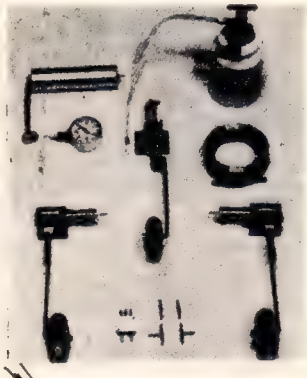
1085 COMPLETE ASS'Y 2REQ

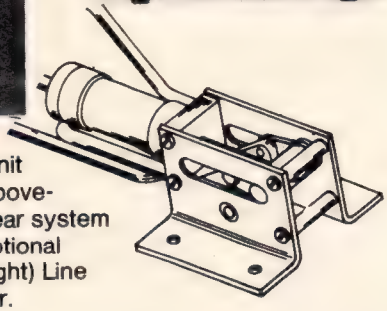


Assembly Instructions

1. Lubricate O-ring (1) & assemble over nipple (2) to seat in groove. Slide gland (3) over nipple from tubing end with concave face toward O-ring.
2. Slip knurled nut (4) over nipple & seal assembly & thread onto fitting (5) to seat gland (3) in nut (4)
3. Completed coupling should only be hand tightened & should be loosened for prolonged storage of the system.
4. Polarization may be accomplished by assembling tubing by color code as described in the text & the couplings in alternate male female configuration as shown.
5. The free turning knurled nut (4) is identified with a machined band. To avoid twisting the pressure lines nut (4) should be turned while holding fitting (5) firm.

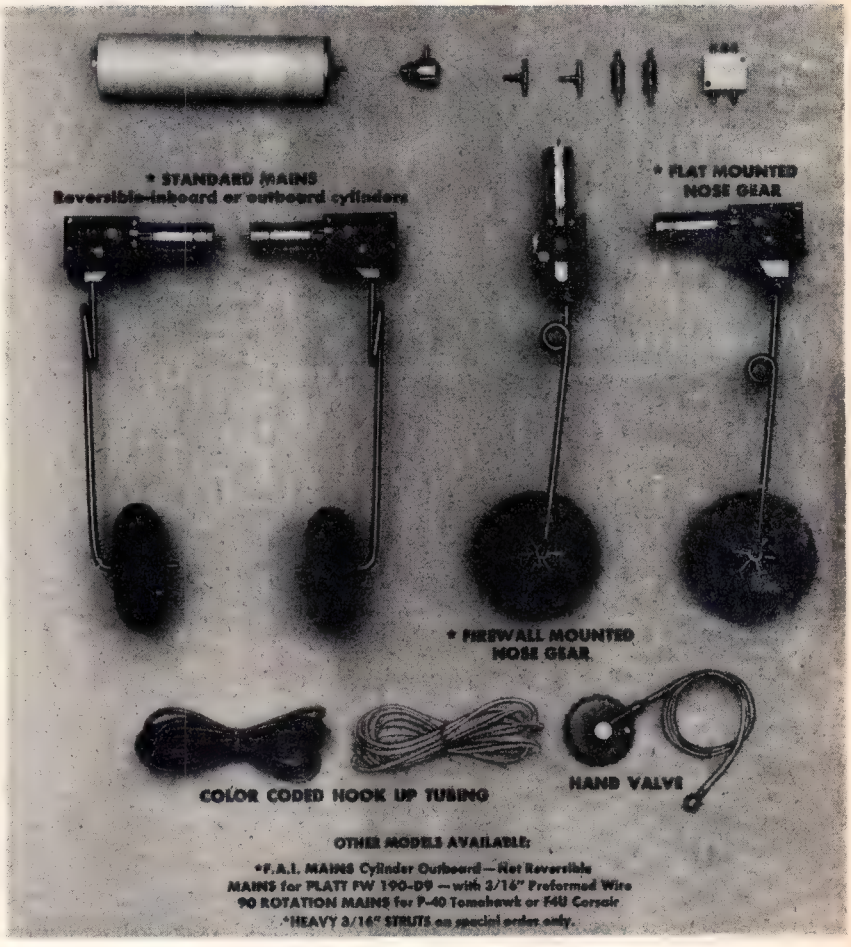






(Above) Main gear unit in down position. (Above-right) Complete 3 gear system shown along with optional pressure gauge. (Right) Line drawing of main gear.

An important tip for your customer to improve landing gear life: All gear should be mounted so that the gear rests against a foam cushion in its up position. This will dramatically improve the life of the gear.



Rom-Air retracts are the choice of the pros due to their exceptional reliability and durability. The system is unique in that it uses compressed Freon 12 as an energy source rather than servos or electric motors.

Each system comes complete with the retracts, freon airborne tank, all hoses and valves, and all necessary fittings, in addition to one can of freon. We strongly suggest that you order two line couplers with each set as they make the removal of your wing much easier.

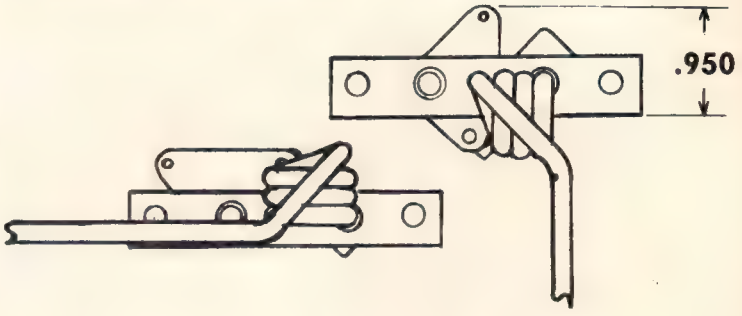
ROM22073	RHOM 1073 COLOR CODED TUBING	3.49	3.25
ROM22100	RHOM 1001FW 2 GEAR FOR FW-190	95.00	80.00
ROM22101	RHOM 1001 2 GEAR - MAINS	79.95	69.95
ROM22102	RHOM 1001FAI 2 GEAR - SLIMLINE	79.95	69.95
ROM22104	RHOM 1000 3 GEAR - FIREWALL	114.95	99.95
ROM22105	RHOM 1000BM 3 GEAR-FLAT MOUNT	114.95	99.95
ROM22106	RHOM 1001 90-DEG 2-GR ROTATING	114.95	99.95
ROM22107	RHOM 1000 90-DEG 3-GR ROTATING	149.95	129.95
ROM22108	RHOM 90 D. TURN GR. CONVERSION	24.95	22.45
ROM22114	RHOM 1004 NOSE GEAR - FIREWALL	42.50	33.95
ROM22115	RHOM 1005 NOSE GEAR-FLAT MOUNT	42.50	33.95
ROM22169	RHOM 1069 PRESSURE GAUGE	14.95	13.95
ROM22182	RHOM 1082 FREON - 14 OZ.	3.00	2.75
ROM22184	RHOM 1084 OIL 1-1/4 OZ.	1.75	1.65
ROM22185	RHOM 1085 LINE COUPLER- 1 ONLY	2.00	1.90

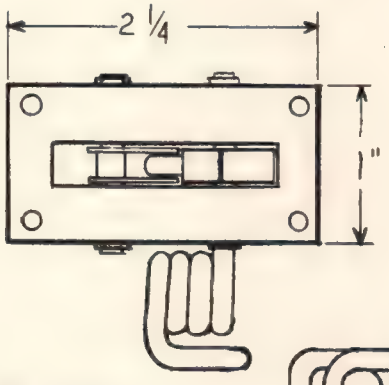


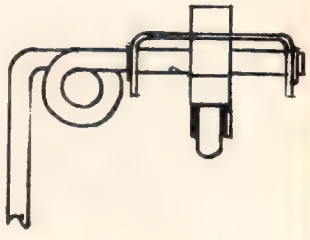
SONIC SYSTEMS

TORSIONAIRE

A RETRACT GEAR THAT HAS IT ALL







Included in the GR-3 system are the following components:

- 3 miniature precision air cylinders
- 1 4 way control valve
- 1 check valve for vehicle charging
- 1 supply can valve with special chuck
- 7 feet of hook-up tubing
- 2 "T" fittings
- 2 straight connectors
- 1 airborne supply tank

GR-3	under 4 ounces
GR-2	3.4 ounces

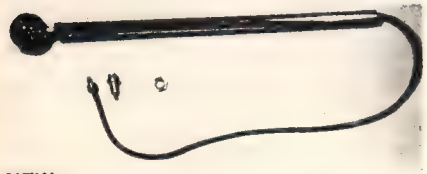
ACTUATORS: Pictured above is the GR-3X 3 gear actuator system along with optional can valve and special chuck.

GR-3X SYSTEM #SOS22305 Includes 3 air cylinders, 4 way control valve, check valve for charging, 7 feet hook-up tubing, one dual fitting, two straight connectors, airborne supply tank, and complete instructions.

GR-3A SYSTEM #SOS22304 Same as GR-3X system except this comes with a Supercharger pump in addition.

MONITAIRE #SOS22402 Miniature pressure indicator that mounts on the aircraft itself.

RETRACTS: Pictured above is the new Sonic-Systems Torsionaire Retract Gear. Features a low profile of .95" and nylon bearings. They work well with actuators.



NEW
Sonic Supercharger Hand operated pump to pressurize Sonic and Rom-Air Retracts. Forget problems with temperature and lubrication. Don't pack up and go home because your supply of freon is exhausted. Easily pump to 100 P.S.I., furnished with airborne valve and quick chuck.



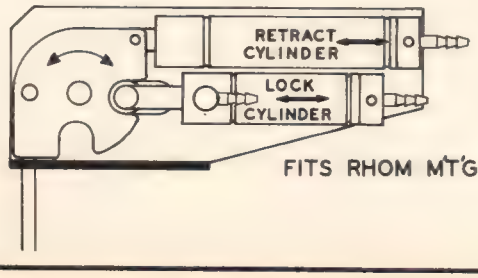


NEW
Sonic Quick Disconnects for attaching wing. No need to cut the lines. Compact, rustproof, and inexpensive.

SUPERCHARGER #SOS22400
QUICK DISCONNECTS(2) #SOS22401

SOS22001	SONIC-SYSTEMS NOSE GR. RETRACT	17.95	14.35
SOS22002	SONIC SYSTEMS 2 GEAR RETRACTS	17.95	14.35
SOS22304	SONIC-SYSTEM GR-3A W/CHARGER	55.90	44.70
SOS22305	SONIC-SYSTEM GR-3X WO/CHARGER	44.90	35.95
SOS22400	SONIC SYSTEMS SUPER CHARGER II	11.95	9.50
SOS22401	SONIC SYSTEMS QUICK-DISCONNECT	3.95	3.55
SOS22402	SONIC SYSTEMS MONITAIRE	6.95	6.25

SONIC SYSTEMS TURFMASTER GEAR



The drawing to the left of the Turfmaster gear was received just at press time. No details and no prices are available but we thought we would include it so that when (or if) it comes out you will have some idea what it is. Study the drawing—it looks like a very positive lock system.

SPINNERS

The "nose cone" over the propellor hub is called the spinner. The purpose of the spinner is to fair in the propellor to the cowl. On a model, the spinner is sometimes used to hide the prop nut, while removing the hazard of the sharp edges of that nut.

For some planes, especially scale ships, the spinner is essential in the streamlining of the plane. When building this type of plane, you should be careful to select the proper spinner.

One misconception that most people seem to have with spinner selection, is that of thinking that spinner size is affected by engine size. This is not so. The engine has absolutely nothing to do with the size of the spinner. You should select the spinner by referring to the plans of your kit, and seeing what size the *airplane* calls for.

For CB Associates and Sullivan spinners, you should be sure to select the appropriate adapter, so that your spinner will fasten onto the plane. Fox spinners also require adapters, but they come with one, the size is ¼-28.

The other brands we handle, Goldberg, and Ace, need no adapters but are held on by the prop nut. Note, though, Ace spinners will only work on Cox engines, as the spinners are for ½A airplanes only.

PROP NUT THREAD SIZE CHART

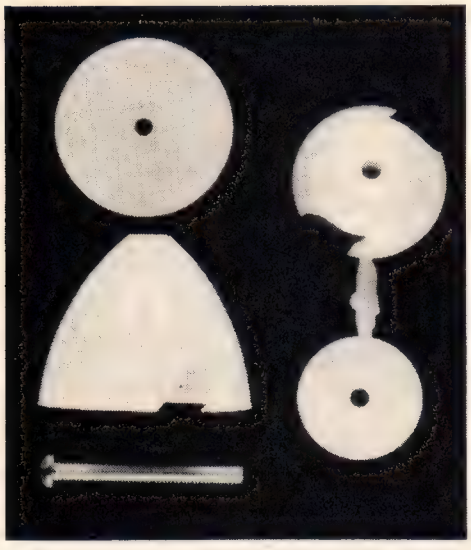
This chart will allow you to select the proper adapter so that your C.B. Associates or Sullivan spinner can be mounted on your aircraft. Just look up your engine on the chart to find the proper adapter size. If your engine is not shown, measure the outside diameter of the THREADED portion of the propshaft. This will tell you what size you'll need. If your engine is imported, you may have to check to see if you need a metric adapter. Sullivan adapters fit all of their spinners, regardless of spinner size. If your C.B. Spinner is 3/4", you'll need a small C.B. adapter. Fox spinners come with 1/4 - 28 adapters on 2" or larger spinners, 10 - 32 on smaller spinners. If you need something else, look up the size you need on the chart.

(For use with C.B., Sullivan, Fox and others requiring adaptors)

THREAD	ENGINES
¼-28	FOX 25, 29, 40, 45; H.B. 61; H.P. 61; K&B 19, 40; O.S. MAX 20, 25, 30, 35, 40, 50, 60; ROSS 60; SUPERTIGRE 23, 35, 46, 60; VECO .19; WEBRA 40, 61, Speed; K&B 61 Series 75; KRAFT 61.
6 m.m.	ENYA 15, 19; O.S. MAX Wankel 30.
7 m.m.	ENYA 29, 35, 40, 45, 60; SUPERTIGRE 71.
5/16 x 24	FOX 60, 78; MERCO 61; O.S. MAX 80; K&B 61 Series 72; VECO 61.
10-32	FOX 15, 19; O.S. MAX Pet 099, 10.

NOTE: 1¾" Spinners use small version adaptors only.

ACE R/C



ACE 1" and 1 5/16" DIA. SPINNERS

With the ever increasing popularity of 1/2A pattern and racing there was a need for a high quality small spinner designed expressly for the Cox Tee Dee .049's and high RPMs.

Since regular nylong will stretch and expand at 20,000 RPM, these spinners are made of glass fibre-filled nylon for rigidity.

Will fit all Cox .049/.051's. White only.

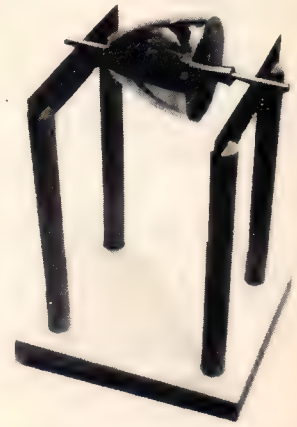
ACE18005	ACE SPR1 SPINNER 1 IN.	.99	.95
ACE18010	ACE SPR2 SPINNER 1-5/16 IN.	1.19	1.15

PRATHER PRODUCTS

New! SPINNER BALANCER

A balanced spinner is just as important as a balanced prop.

- **Reduces Vibration**
- **Less Engine Wear**
- **Less Radio Failure**
- **More RPM**



BALANCING MADE EASY

PRA21580	PRATHER #158 SPINNER BALANCER	7.95	7.15

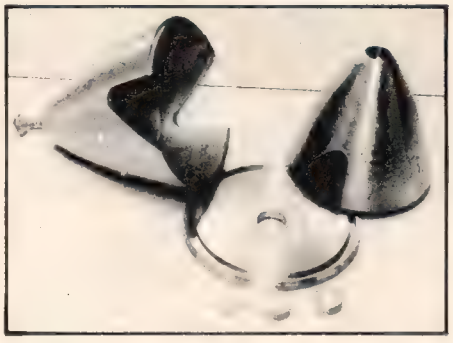
This spinner balancer works equally well on both nylon and metal spinners that use a front retaining screw for attachment to engine. This includes Ace, C.B. Associates, Fox, and Sullivan spinners. Don't underestimate the effect of an unbalanced spinner—it could well be the vibration source of irratic radio operation. Don't take a chance!

PLASTIC SPINNERS

Size

1¾" . .
2" . .
2¼" . .
2½" . .
2¾" . .
3" . .
3½" (P-51)
3½" (P-40)





ALUMINUM SPINNERS

Size

2"
2¼"
2½"

SPINNER ADAPTER NUTS

	Notches
1/4-28 x 8-32 x 1/2" hex	0
7 mm x 8-32 x 1/2" hex	1
6 mm x 8-32 x 1/2" hex	2
5/16-24 x 8-32 x 1/2" hex	3
1/4-28 x 4-40 x 7/16" hex	0
12-32 x 4-40 x 7/16" hex	1
6 mm x 4-40 x 7/16" hex	2
10-32 x 4-40 x 7/16" hex	3
5 mm x 4-40 x 7/16" hex	4

Reduce Radio Failure with C.B. Products

IMPORTANT THINGS TO DO TO REDUCE RADIO FAILURE: **Balance your propellers; use a C.B. spinner; use a C.B. mount.** You can feel the difference as soon as you start the engine.

DOUBLE, EVEN TRIPLE YOUR RADIO AND SERVO LIFE!! According to radio experts, the cause of 95% of radio and servo failures is vibration. Our spinners and motor mounts are designed to reduce vibration to a minimum. Use our spinners in Formula I competition – they have been tested to 35,000 RPM.

C.B. ASSOCIATES

PLASTIC AND ALUMINUM SPINNERS

Machined aluminum, and plastic cones with aluminum backplates. Will fit any engine with 3/8, 5/16, 7 mm or 1/4" shafts. All smooth-lined and true running, these spinners will aid the speed and beauty of any model airplane. Aluminum spinners available in 2", 2¼" and 2½" now (larger sizes later); and the plastic spinners are available in 1¾" to 3½" in red, black and white colors.

CBA18005	C B SPINNER ALUM 2 #5505	4.95	4.50
CBA18006	C B SPINNER ALUM 2 1/4 #5506	5.50	5.00
CBA18007	C B SPINNER ALUM 2 1/2 #5507	5.95	5.50
CBA18111	C B SPINNER 1-3/4 RED #5001	2.95	2.65
CBA18112	C B SPINNER 1-3/4 BLACK #5003	2.95	2.65
CBA18113	C B SPINNER 1-3/4 WHITE #5005	2.95	2.65
CBA18121	C B SPINNER 2 IN. RED #5013	3.25	2.95
CBA18122	C B SPINNER 2 IN. BLACK #5015	3.25	2.95
CBA18123	C B SPINNER 2 IN. WHITE #5017	3.25	2.95
CBA18131	C B SPINNER 2-1/4 RED #5025	3.75	3.40
CBA18132	C B SPINNER 2-1/4 BLACK #5027	3.75	3.40
CBA18133	C B SPINNER 2-1/4 WHITE #5029	3.75	3.40
CBA18141	C B SPINNER 2-1/2 RED #5037	3.95	3.60
CBA18142	C B SPINNER 2-1/2 BLACK #5039	3.95	3.60
CBA18143	C B SPINNER 2-1/2 WHITE #5041	3.95	3.60
CBA18151	C B SPINNER 2-3/4 RED #5049	4.75	4.30
CBA18152	C B SPINNER 2-3/4 BLACK #5051	4.75	4.30
CBA18153	C B SPINNER 2-3/4 WHITE #5053	4.75	4.30
CBA18161	C B SPINNER 3 IN. RED #5061	4.95	4.50
CBA18162	C B SPINNER 3 IN. BLACK #5063	4.95	4.50
CBA18163	C B SPINNER 3 IN. WHITE #5065	4.95	4.50
CBA18181	C B SPINNER 3.5 P-40 RED #5085	6.25	5.75
CBA18182	C B SPINNER 3.5 P-40 BLK #5087	6.25	5.75
CBA18183	C B SPINNER 3.5 P-40 WHI #5089	6.25	5.75
CBA18191	C B SPINNER 3.5 P-51 RED #5073	6.25	5.75
CBA18192	C B SPINNER 3.5 P-51 BLK #5075	6.25	5.75
CBA18193	C B SPINNER 3.5 P-51 WHI #5077	6.25	5.75
CBA18211	C B ADAP LG #5201 1/4-28 0 N	.55	.50
CBA18212	C B ADAP LG #5202 7 MM 1 N	.55	.50
CBA18213	C B ADAP LG #5203 6 MM 2 N	.55	.50
CBA18214	C B ADAP LG #5204 5/16-24 3 N	.55	.50
CBA18221	C B ADAP SM #5220 1/4-28 0 N	.50	.45
CBA18223	C B ADAP SM #5222 6 MM 2 N	.50	.45
CBA18226	C B ADAP SM #5223 10-32 3 N	.50	.45
CBA18227	C B ADAP SM #5224 5 MM 4 N	.50	.45

FOX



CONVENTIONAL **SLIM JIM** **CONICAL**

Fox spinners are machined from solid aluminum bar and are buffed to a high lustre. The three different contours shown above are all available in 1½" to 2½" diameter

FOX18011	FOX #60106 SPINNER CONV 1 1/2	8.00	6.80
FOX18012	FOX #60107 SPINNER CONV 1 3/4	8.50	7.25
FOX18013	FOX #60108 SPINNER CONV 2	9.00	7.65
FOX18014	FOX #60109 SPINNER CONV 2 1/4	9.50	7.95
FOX18015	FOX #60110 SPINNER CONV 2 1/2	10.00	8.50
FOX18021	FOX #60206 SPINNER S JIM 1 1/2	8.50	7.25
FOX18022	FOX #60207 SPINNER S JIM 1 3/4	9.00	7.65
FOX18023	FOX #60208 SPINNER S JIM 2	9.50	7.95
FOX18024	FOX #60209 SPINNER S JIM 2 1/4	10.00	8.50
FOX18025	FOX #60210 SPINNER S JIM 2 1/2	10.50	8.95
FOX18031	FOX #60306 SPINNER CONCL 1 1/2	8.00	6.80
FOX18032	FOX #60307 SPINNER CONCL 1 3/4	8.50	7.25
FOX18033	FOX #60308 SPINNER CONCL 2	9.00	7.65
FOX18034	FOX #60309 SPINNER CONCL 2 1/4	9.50	7.95
FOX18035	FOX #60310 SPINNER CONCL 2 1/2	10.00	8.50
FOX18401	FOX #60401 SHORT ADAPT 10/32	1.00	.95
FOX18402	FOX #60402 MEDIUM ADAPT 10/32	1.00	.95
FOX18403	FOX #60403 SHORT ADAPT 1/4X28	1.00	.95
FOX18404	FOX #60404 MEDIUM ADAPT 1/4X28	1.00	.95
FOX18405	FOX #60405 LONG ADAPT 1/4X28	1.00	.95
FOX18406	FOX #60406 MEDIUM ADAP 5/16X24	1.00	.95
FOX18407	FOX #60407 LONG ADAPT 5/16X24	1.00	.95
FOX18503	FOX #60503 SPINNER NUT 10/32	1.00	.95
FOX18504	FOX #60504 SPINNER NUT 1/4	1.25	1.20

FOX SPINNERS - THE WORLD'S FINEST

Fox "machined from bar" spinners have proven themselves to be first choice among modelers to whom money is no object. They are machined from solid aluminum bar and have a variable wall thickness according to the strength required. They have the durability to withstand continuous use with an electric starter. They will not work loose or spin off. Fox machined from bar spinners are offered in 3 contours. Each spinner has been buffed to a high luster. The Fox method of attaching spinners completely eliminates the possibility of spinning the assembly off with a starter as the spinner is held on with a small diameter nose screw which ties in with a special prop nut supplied. The interlocking feature of the spinner shell into the rear cover prevents any spreading.

Diameter	Conventional Contour No.	Slim Jim Contour No.	Conical Contour	Standard Shaft Size
1½"	60106	60206	60306	10-32
1¾"	60107	60207	60307	10-32
2"	60108	60208	60308	¼-28
2¼"	60109	60209	60309	¼-28
2½"	60110	60210	60310	¼-28

Adapter Nuts and Mating Washers	
60401	10-32 Short
60402	10-32 Medium
60403	¼-28 Short
60404	¼-28 Medium
60405	¼-28 Long
60406	5/16-24 Medium
60407	5/16-24 Medium



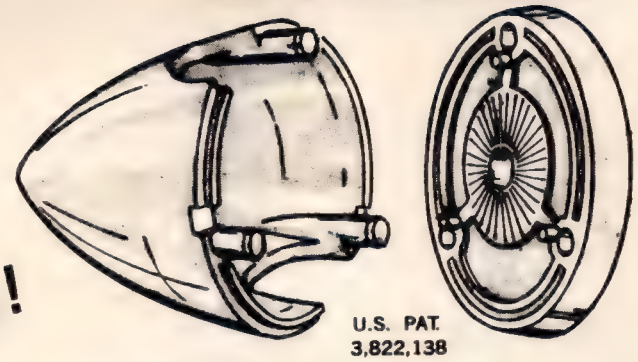
FOX ALUMINUM SPINNER NUTS

Fox aluminum spinner nuts are machined from solid aluminum bar and contoured to a pleasing appearance. They replace the normal nut and washer used to hold on a propeller. They are tightened by means of a cross hole drilled near the front. They make a very pleasing addition to airplanes not suited to the larger full size spinners. We do not recommend them for motors of over .45 displacement because of the problem in getting them tight enough to hold the prop. On the smaller motors they work fine.

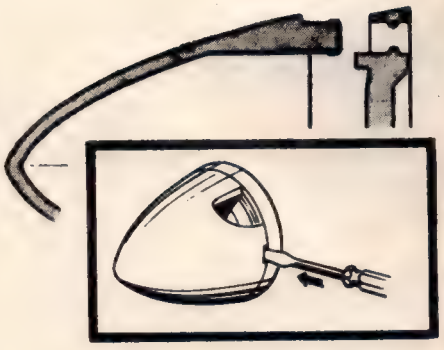
60503 10/32 Spinner Nut **60504 ¼" Spinner Nut**

GOLDBERG

NEW! "SNAP-ON" SPINNERS!

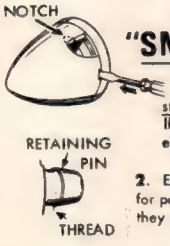


U.S. PAT. 3,822,138



SIMPLE TO USE, NO SCREWS OR HARDWARE REQUIRED!

At last, a spinner that works like you've always wanted! Goes on like SNAP–SNAP–SNAP! Comes off 1–2–3! No screws to tighten, no extra hardware to buy. Built to take electric starters. Over 2 years in development. Study the features shown here,
CG Snap-On Spinner – the beautiful one that does the job like no spinner ever did before!



HOW TO USE YOUR "SNAP-ON" SPINNER

1. Carefully push small screwdriver straight into all 3 slots - DON'T TWIST! If prop is too wide, trim out for leading edge as indicated - not trailing edge.

2. Examine Retaining Pins closely for possible tiny threads. Remove -- they can make assembly hard.

3. For easier assembly, rub fingers around Retaining Pins to lubricate. If necessary, "break-in" pins by standing on spinner to assemble.



4. Set prop against Line-Up pin, and hold while tightening nut.



5. With Retaining Pin at top, press hands together suddenly. Rotate next pin to top and repeat.



GBG18011	GOLDBERG SPINNER 1 1/2 RED	1.10	1.05
GBG18012	GOLDBERG SPINNER 1 1/2 BLACK	1.10	1.05
GBG18013	GOLDBERG SPINNER 1 1/2 WHITE	1.10	1.05
GBG18021	GOLDBERG SPINNER 1 3/4 RED	1.25	1.20
GBG18022	GOLDBERG SPINNER 1 3/4 BLACK	1.25	1.20
GBG18023	GOLDBERG SPINNER 1 3/4 WHITE	1.25	1.20
GBG18031	GOLDBERG SPINNER 2 IN. RED	1.50	1.40
GBG18032	GOLDBERG SPINNER 2 IN. BLACK	1.50	1.40
GBG18033	GOLDBERG SPINNER 2 IN. WHITE	1.50	1.40
GBG18041	GOLDBERG SPINNER 2 1/4 RED	1.75	1.65
GBG18042	GOLDBERG SPINNER 2 1/4 BLACK	1.75	1.65
GBG18043	GOLDBERG SPINNER 2 1/4 WHITE	1.75	1.65
GBG18051	GOLDBERG SPINNER 2 1/2 RED	2.00	1.90
GBG18052	GOLDBERG SPINNER 2 1/2 BLACK	2.00	1.90
GBG18053	GOLDBERG SPINNER 2 1/2 WHITE	2.00	1.90

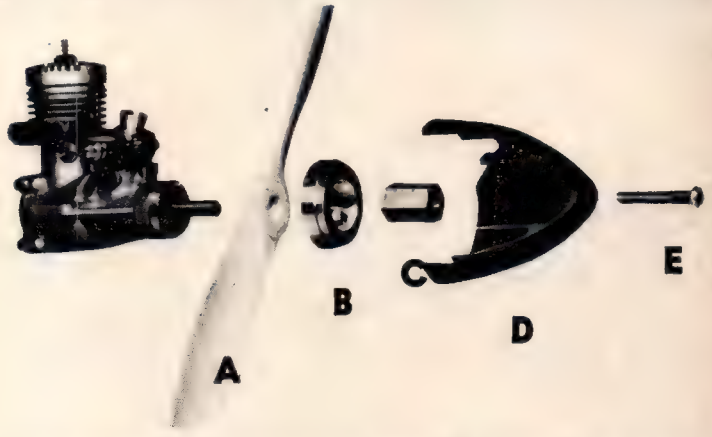
SULLIVAN

PROP-LOC HI-TORK NYLON SPINNER

FINALLY . . . PROP-LOC IS HERE!

YOUR PROP NEED NEVER FALL OFF AGAIN.

After all those years of living with the problem of props falling off when flipping on the ground or when shifting from low to high in the air, you can finally forget it. The problem's been solved. Our Pylon Brand Prop-Loc Hi-Tork Spinners and Spinnerettes in all popular sizes are on your dealers shelves now. Wait till you see them. You'll agree that Prop-Loc is the best way ever devised to solve that annoying — and sometimes costly — problem once and for all. Designed for use with or without Electric Starters.



The above picture shows the assembly procedure for using a Sullivan Prop-Loc spinner. The propeller (A) is put on the engine shaft. Then the adaptor (B and C) is screwed on in place of the regular prop nut. The spinner cone (D) is then located. The spinner cone is secured using the spinner screw (E). You must have a Sullivan adaptor (B and C) and the correct size is determined by engine thread size (see chart on Page 255).

SUL18211	SULLIVAN ADAPTOR 1/4-28 #PL28	1.10	1.05
SUL18212	SULLIVAN ADAPTOR 7 MM. #PL7	1.10	1.05
SUL18213	SULLIVAN ADAPTOR 6 MM. #PL6	1.10	1.05
SUL18214	SULLIVAN ADAPTOR 5/16-24 #PL24	1.10	1.05
SUL18311	SULLIVAN SPINNER 1 1/2 RED	.80	.75
SUL18312	SULLIVAN SPINNER 1 1/2 BLACK	.80	.75
SUL18313	SULLIVAN SPINNER 1 1/2 WHITE	.80	.75
SUL18321	SULLIVAN SPINNER 1 3/4 RED	.80	.75
SUL18322	SULLIVAN SPINNER 1 3/4 BLACK	.80	.75
SUL18323	SULLIVAN SPINNER 1 3/4 WHITE	.80	.75
SUL18331	SULLIVAN SPINNER 2 RED	.80	.75
SUL18332	SULLIVAN SPINNER 2 BLACK	.80	.75
SUL18333	SULLIVAN SPINNER 2 WHIT	.80	.75
SUL18341	SULLIVAN SPINNER 2 1/4 RED	.80	.75
SUL18342	SULLIVAN SPINNER 2 1/4 BLACK	.80	.75
SUL18343	SULLIVAN SPINNER 2 1/4 WHITE	.80	.75
SUL18351	SULLIVAN SPINNER 2 1/2 RED	.80	.75
SUL18352	SULLIVAN SPINNER 2 1/2 BLACK	.80	.75
SUL18353	SULLIVAN SPINNER 2 1/2 WHITE	.80	.75
SUL18361	SULLIVAN SPINNER 2 3/4 RED	.80	.75
SUL18362	SULLIVAN SPINNER 2 3/4 BLACK	.80	.75
SUL18363	SULLIVAN SPINNER 2 3/4 WHITE	.80	.75

STRIPING/TRIM/DECALS

Stripes! Stars! Lettering, ads, roundels! All of these make our planes more beautiful, more colorful, and most of all, more belivable.

All of the striping tapes, trim sheets, and decals help us to accomplish just that . . . making the plane look better. To be sure, the more experience you have finishing a plane, the better the job you'll do, but even the simplest stripe along the side of the plane makes it look a lot better.

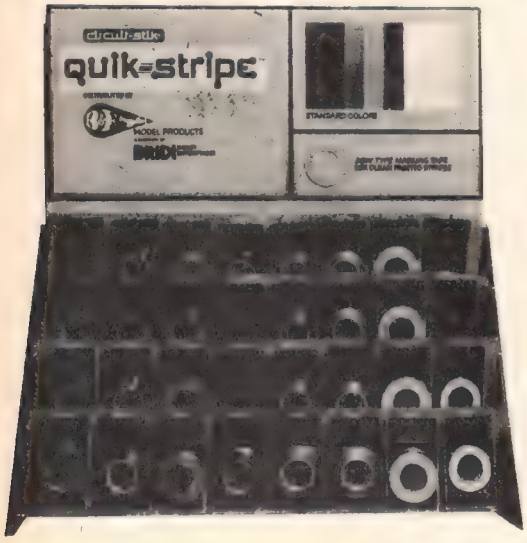
Striping tape is just that. It is a thin, colored tape that you apply to the plane to get pinstripes. They come in a variety of widths and colors, so that you can get the effect you want. For wider stripes, or complex shapes, trim sheets fill the bill. They are wide and allow you to cut various shapes and letters. Trim sheets also come in a wide variety of colors . . . even Checkerboard!

Decals are things we're all familiar with. They allow us to put complex designs on the plane because somebody else has done all the hard work. All we do is transfer them to the plane.

Striping tape is made by Bridi and Goldberg. Trim sheets are made by Top Flite (Monokote) and Lanier, and Decals are made by Dave Platt, House of Balsa, and Top Flite (Monokote Markings).

For those of you who paint, Fliteglas offers their Liquid Masking Film. This allows you to mask off an area and then paint on the design you want.

Tatone brings you their instruments, which can help you make the plane's cockpit look realistic.



BRIDI

quik-stripe

DIRECTIONS FOR STRIPING TAPES

1. Clean surface thoroughly, as well as hands, before applying tape. Surface temperatures should not be lower than 45°F. or higher than 65°F. If surface is too hot, use a damp cloth to cool surface.
2. Remove protective bottom liner material to expose adhesive as needed.
3. Press tape firmly in place without over stretching.
4. Your striping will be ready to use after 48 hours drying time at 70°F. or 6 hours in open sunshine.
5. For fastest and most permanent bond use a heat gun or portable hair dryer. Apply heat lightly with continuous motion.

B & E QUIK-STRIPE

Available in several brilliant colors and sizes, this extra thin (only 2 thousandths of an inch) tape features maximum flexibility. Great for smooth curves and straight lines even on complex contours. Won't fall of due to specially formulated pressure sensitive adhesive that will withstand model fuels. Also available is a special masking tape.

BRI42310	B&E MASKING QSI-MSK 1/16 IN	1.00	.95
BRI42311	B&E STRIPE QS1-RED 1/16 IN.	1.98	1.90
BRI42312	B&E STRIPE QS1-ORANGE 1/16 IN.	1.98	1.90
BRI42313	B&E STRIPE QS1-YELLOW 1/16 IN.	1.98	1.90
BRI42314	B&E STRIPE QS1-WHITE 1/16 IN.	1.98	1.90
BRI42315	B&E STRIPE QS1-SILVER 1/16 IN.	1.98	1.90
BRI42316	B&E STRIPE QS1-BLUE 1/16 IN.	1.98	1.90
BRI42318	B&E STRIPE QS1-GOLD 1/16 IN.	1.98	1.90
BRI42319	B&E STRIPE QS1-BLACK 1/16 IN.	1.98	1.90
BRI42320	B&E MASKING QSI-MSK 3/32 IN	1.19	1.10
BRI42321	B&E STRIPE QS1-RED 3/32 IN.	2.69	2.55
BRI42322	B&E STRIPE QS1-ORANGE 3/32 IN.	2.69	2.55
BRI42323	B&E STRIPE QSI-YELLOW 3/32 IN	2.69	2.55
BRI42324	B&E STRIPE QSI-WHITE 3/32 IN	2.69	2.55
BRI42325	B&E STRIPE QSI-SILVER 3/32 IN	2.69	2.55
BRI42326	B&E STRIPE QS1-BLUE 3/32 IN.	2.69	2.55
BRI42328	B&E STRIPE QSI-GOLD 3/32 IN	2.69	2.55
BRI42329	B&E STRIPE QSI-BLACK 3/32 IN	2.69	2.55
BRI42330	B&E MASKING QSI-MSK 1/8 IN	1.39	1.30
BRI42331	B&E STRIPE QS1-RED 1/8 IN.	2.69	2.55
BRI42332	B&E STRIPE QSI-ORANGE 1/8 IN	2.69	2.55
BRI42333	B&E STRIPE QSI-YELLOW 1/8 IN	2.69	2.55
BRI42334	B&E STRIPE QSI-WHITE 1/8 IN	2.69	2.55
BRI42335	B&E STRIPE QSI-SILVER 1/8 IN	2.69	2.55
BRI42336	B&E STRIPE QSI-BLUE 1/8 IN	2.69	2.55
BRI42338	B&E STRIPE QSI-GOLD 1/8 IN	2.69	2.55
BRI42339	B&E STRIPE QSI-BLACK 1/8 IN	2.69	2.55
BRI42340	B&E MASKING QSI-MSK 1/4 IN	1.59	1.50
BRI42341	B&E STRIPE QS1-RED 1/4 IN.	3.69	3.50
BRI42342	B&E STRIPE QSI-ORANGE 1/4 IN	3.69	3.50
BRI42343	B&E STRIPE QSI-YELLOW 1/4 IN	3.69	3.50
BRI42344	B&E STRIPE QSI-WHITE 1/4 IN	3.69	3.50
BRI42345	B&E STRIPE QSI-SILVER 1/4 IN	3.69	3.50
BRI42346	B&E STRIPE QSI-BLUE 1/4 IN	3.69	3.50
BRI42348	B&E STRIPE QSI-GOLD 1/4 IN	3.69	3.50
BRI42349	B&E STRIPE QSI-BLACK 1/4 IN	3.69	3.50
BRI42350	B&E MASKING QSI-MSK 3/8 IN	1.79	1.70
BRI42360	B&E MASKING QSI-MSK 1/2 IN	1.99	1.90



1 Pint

FLITEGLAS MODELS

LIQUID MASKING FILM

Makes Complicated Paint Schemes Easy

★ EASILY MASKS LETTERS INSIGNIA, THIN LINES & CURVES

★ MASKS ANY FINISH OR SURFACE

★ LEAVES SHARP, CLEAN PAINT LINES

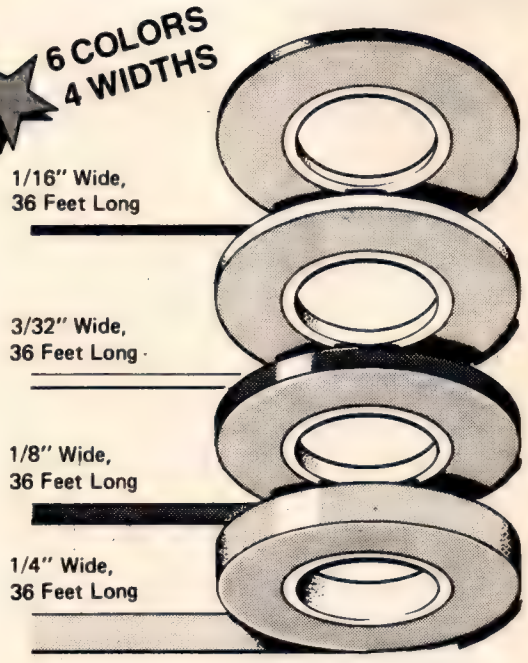
FLI42000	FLITEGLAS LIQUID MASKING FILM	5.95	5.35

GOLDBERG

DJ's MULTI-STRIPE

●YELLOW ●BLACK ●BLUE
●WHITE ●GOLD ●RED

6 COLORS
4 WIDTHS



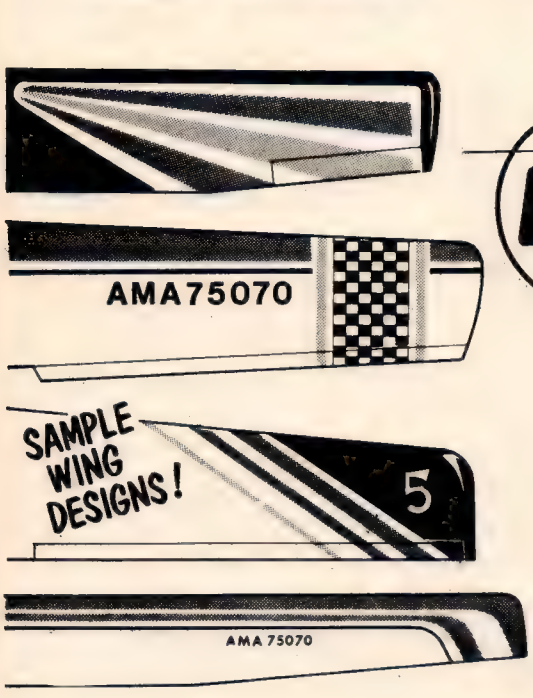
GEN. JIMMY DOOLITTLE, the famous flyer, with a model of the Gee Bee R1, one of the ships he raced and won with back before W.W. 2. The model was built by Steve Crowe and Tom Cone, and is a highly successful R/C ship. Took 600 hrs. to construct, weighs 5.3 lbs. complete, and uses black DJ Multi-Stripe tape around the red trim lines.



Modelers by the thousands now use **Multi-Stripe** to beautify their models. And that includes the best, such as Terry Prather, Walt Moucha, Don Dewey, etc. Main reason is the patented Multi-Stripe adhesive, which cures in sunlight. If YOU want the best, choose Multi-Stripe! See your dealer!

DJ MULTI-STRIPE

Famous modelers are using DJ's Multi Stripe—because it works, like no other striping tape ever! It's very thin and has a special expensive adhesive—so it bonds permanently, and sticks like paint. There's no other tape like it! Final fuel-proof bonding takes place in sunlight. No more shrinking, lifting, and getting dirty—problems that end up ruining the looks of a beautiful model. More and more leaders are using DJ's, so take their tip—try it, you'll like it, too.



Multi-Stripe has a patented adhesive which cures in 3 hours in the sun. It prevents loose ends and curves from "popping" up while cleaning your model after a day of fun. No job is too big with Multi-Stripe, simply because - it works!

GBG42211	DJ STRIPE 16R RED 1/16 IN.	1.98	1.90
GBG42213	DJ STRIPE 16Y YELLOW 1/16 IN	1.98	1.90
GBG42214	DJ STRIPE 16W WHITE 1/16 IN.	1.98	1.90
GBG42216	DJ STRIPE 16D DK BLUE 1/16 IN.	1.98	1.90
GBG42218	DJ STRIPE 16G GOLD 1/16 IN.	1.98	1.90
GBG42219	DJ STRIPE 16B BLACK 1/16 IN.	1.98	1.90
GBG42221	DJ STRIPE 3R RED 3/32 IN.	2.69	2.55
GBG42223	DJ STRIPE 3Y YELLOW 3/32 IN	2.69	2.55
GBG42224	DJ STRIPE 3W WHITE 3/32 IN.	2.69	2.55
GBG42226	DJ STRIPE 3D DK BLUE 3/32 IN.	2.69	2.55
GBG42228	DJ STRIPE 3G GOLD 3/32 IN.	2.69	2.55
GBG42229	DJ STRIPE 3B BLACK 3/32 IN.	2.69	2.55
GBG42231	DJ STRIPE 8R RED 1/8 IN.	2.69	2.55
GBG42233	DJ STRIPE 8Y YELLOW 1/8 IN.	2.69	2.55
GBG42234	DJ STRIPE 8W WHITE 1/8 IN.	2.69	2.55
GBG42236	DJ STRIPE 8D DK BLUE 1/8 IN.	2.69	2.55
GBG42238	DJ STRIPE 8G GOLD 1/8 IN.	2.69	2.55
GBG42239	DJ STRIPE 8B BLACK 1/8 IN.	2.69	2.55
GBG42241	DJ STRIPE 4R RED 1/4 IN.	3.69	3.50
GBG42243	DJ STRIPE 4Y YELLOW 1/4 IN.	3.69	3.50
GBG42244	DJ STRIPE 4W WHITE 1/4 IN.	3.69	3.50
GBG42246	DJ STRIPE 4D DK BLUE 1/4 IN.	3.69	3.50
GBG42248	DJ STRIPE 4G GOLD 1/4 IN.	3.69	3.50
GBG42249	DJ STRIPE 4B BLACK 1/4 IN.	3.69	3.50

HOUSE OF BALSA



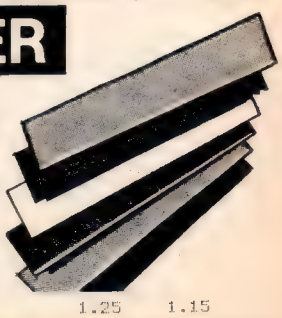
These self-adhesive, fuelproof mylar full-color product decals are a must for finishing your ¼ Midget. Will bond to any clean surface including plastic films such as Monokote, Solarfilm, and Kwik-Cote.

HOU20001	HOUSE OF BALSA 1/4 MDGT DECALS	1.98	1.90

TRIM LANIER

Trim is the modern, easy way to add individuality to your model. Just cut one of the two basic shapes (the strip or the taper), peel off the backing, press Trim on . . . it stays on until you want to take it off. You can apply Trim to almost any doped, painted, plastic, wood or silk surface.

Every package of Trim contains 6 sheets of 2"x15" Trim in assorted colors—white, blue, red, yellow and black.



LAN42401	LANIER TRIM ASSORTMENT	1.25	1.15

MARKINGS



Series of fuelproof, authentic aircraft markings; correct proportions and colors. Die-cut from self-adhesive MonoKote. Simply peel from backing and press down on model. Adheres to dope, plastic, fiberglass and, of course, Super MonoKote.

U.S. Navy (Black)	L-14B
U.S. Navy (White)	L-14W
U.S. Air Force	L-11
1" Numbers	L-31
2" Numbers	L-32
3" Numbers	L-33
Vintage Insignias, 2 shs.	L-13
Modern insignias, 2 shs.	L-12

TOP FLITE-MONOKOTE

MONOKOTE MARKINGS AND NUMERALS—Printed and die-cut to apply the finishing touch to your model. Navy and Air Force insignia and numerals, AMA letters and numbers, 1", 2" and 3" sizes.

MONOKOTE TRIM SHEETS—Cut out your own trim designs, numerals and markings from wet (pressure sensitive) adhesive trim sheets, 5" x 36" or 26" x 36". Choose from 10 colors. Also available in 4 checkerboard designs, 5" x 36". Ideal for covering foam wings.

REGULAR MONOKOTE TRIM SHEETS— 5"x36"

This material has a sticky adhesive and is recommended for trim areas, designs, color scheming, etc. No ironing required; it's just pressed down on top of the basic covering.

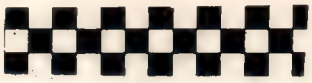
10 ULTRA-HIGH GLOSS COLORS TO CHOOSE FROM:

Missile Red	Jet White	Forest Green	Chrome *
International Orange	Mustang Aluminum	Aztec Gold	* Trim Sheet Only
Piper Yellow	Insignia Blue	Midnight Black	

4 CHECKER BOARD COMBINATIONS: Trim Sheets only — 5" x 36"

Red on White	Red on Clear	Black on White	Black on Clear

Shown ¼ scale, a partial **CHECKER BOARD TRIM SHEET.** Over 600 ½" squares per sheet of this distinctive design



MON42101	MONOKOTE TRIM RED	1.19	1.10
MON42102	MONOKOTE TRIM ORANGE	1.19	1.10
MON42103	MONOKOTE TRIM YELLOW	1.19	1.10
MON42104	MONOKOTE TRIM WHITE	1.19	1.10
MON42105	MONOKOTE TRIM ALUMINUM	1.19	1.10
MON42106	MONOKOTE TRIM INSIGNIA BLUE	1.19	1.10
MON42107	MONOKOTE TRIM GREEN	1.19	1.10
MON42108	MONOKOTE TRIM GOLD	1.19	1.10
MON42109	MONOKOTE TRIM BLACK	1.19	1.10
MON42110	MONOKOTE TRIM CHROME	1.19	1.10
MON42111	MONOKOTE TRIM CKBRD RED/WHITE	1.59	1.50
MON42112	MONOKOTE TRIM CKBRD RED/CLEAR	1.59	1.50
MON42113	MONOKOTE TRIM CKBRD BLK/WHITE	1.59	1.50
MON42114	MONOKOTE TRIM CKBRD BLK/CLEAR	1.59	1.50
MON42511	MONOKOTE MKNG US AIRFORCE L-11	1.98	1.90
MON42512	MONOKOTE MKNG MODERN L-12	3.50	3.25
MON42513	MONOKOTE MKNG VINTAGE L-13	3.50	3.25
MON42514	MONOKOTE MKNG NAVY BLK. L-14B	1.98	1.90
MON42515	MONOKOTE MKNG NAVY WHT. L-14W	1.98	1.90
MON42531	MONOKOTE MKNG 1 IN NUMBRS L-31	1.19	1.10
MON42532	MONOKOTE MKNG 2 IN NUMBRS L-32	1.39	1.30
MON42533	MONOKOTE MKNG 3 IN NUMBRS L-33	1.69	1.60



TATONE

An attractive instrument panel will draw more attention to a model than any other single feature, yet it is the most difficult detail for the average modeler to make. But not any longer, as this Tatone kit does it all!

EACH KIT CONTAINS:

- 5 METAL INSTRUMENT CASES, TURNED AND PLATED
- ALL DIALS AND GLASSES TO FIT CASES
- SELECTION OF TWENTY TYPICAL INSTRUMENTS
- PANEL BACKGROUND
- INSTRUCTIONS

TAT20008	TATONE SCALE INSTRUMENTS 1/4	3.25	3.10
TAT20009	TATONE SCALE INSTRUMENTS 5/16	3.25	3.10
TAT20010	TATONE SCALE INSTRUMENTS 3/8	3.25	3.10
TAT20011	TATONE SCALE INSTRUMENTS 7/16	3.95	3.75
TAT20012	TATONE SCALE INSTRUMENTS 1/2	3.95	3.75

Wheels and Wheel Accessories

Because there are so many differing types of aircraft, we carry many different types of wheels. Both Dubro and Carl Goldberg offer wheels that just have to be the most popular wheels going. They look sharp, and they will take the beating most of us put our planes through.

Kraft wheels are more scale-like, and feature an axle that hides the retainer. They're made of Neoprene rubber, and look like the ones on modern civil aircraft. Those of you who build the Pipers, Cessnas, and Beech's . . . consider Kraft's wheels.

For those of you who like "Golden Age", or earlier airplanes, then you would want wheels that Milman or Williams Brother s manufacture. Milman wheels are the only wheels we carry that are truly spoked. They're for any plane that has wheels with exposed spokes.

If the plane you're modeling had spoked wheels, but the spokes were covered with a canvas covering (the S.E.5a is an example), the "Vintage" wheels offered by Williams are just the thing. Carefully painted, they're very realistic.

Williams' "Golden Age" wheels are just right for your civilian biplane or monoplane from the 30's. These wheels are just right for your Wacos, Travelairs, Fleets, and Pietenpols.

If you're going the WWII military route, then wheels made by Robart are just the thing. They add a touch of realism that no other type of wheel can produce. They are truly scale, allowing you to portray wheels with or without spoked hubs.

For tailwheels, we offer small wheels by Williams and Ace R/C. They are just right for your taildragger or one of those very popular ½A planes.

ACE R/C



ACE 1/2" DIA. WHEELS

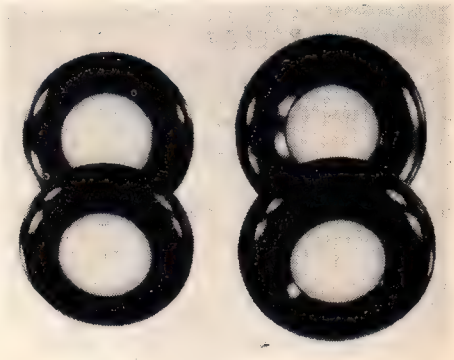
Here is a small, black, light, 1/2" diameter nylon wheel for those special applications such as tailwheels on .049 ships or main wheels on planes such as the "Littlest Stick."

WH5 Ace 1/2" Dia. Wheels, pr.

ACE 1 1/2" and 1 3/4" DIA. WHEELS

These wheels are top quality, low weight, low drag, low bounce, and low cost. White nylon hubs, black tires, for a 3/32" D axle.
From the small plane experts, Ace R/C.

WH15 Ace 1 1/2" D Wheels, pr.
WH175 Ace 1 3/4" D Wheels, pr.



ACE21050	ACE WHLS PR 1/2 IN #WH5	.35	.35
ACE21150	ACE WHLS PR 1-1/2 IN #WH15	1.49	1.45
ACE21175	ACE WHLS PR 1-3/4 IN WH175	1.49	1.45

BANNER



WORKS GREAT ON GEAR LIKE BRIDI AND HALLCO!

OIL TEMPERED SPRING STEEL
AXLE SHAFTS



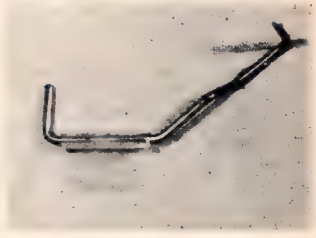
FOR SHEET METAL LANDING GEAR IN 3 SIZES — 3/32, 1/8, & 5/32

BAN26180	BANNER AXLE SHAFTS 1/8 IN (2)	1.40	1.35
BAN26332	BANNER AXLE SHAFTS 3/32 IN (2)	1.30	1.25
BAN26532	BANNER AXLE SHAFTS 5/32 IN (2)	1.50	1.45

BRIDI



Assembly Set #BRI26010
Pictured above, this set includes all parts needed to install main gear.



TAILWHEEL ASSEMBLY #BRI26007

Solve those tail wheel strut bending problems with this simple, easy-to-install assembly. 3/32" dia. wire with a nylon bearing and installation tab.

BRI26007	B&E L-7 TAILWHEEL ASSEMBLY	.99	.95
BRI26010	B&E L-5 LANDING GEAR ASSEMBLY	2.25	2.10

C.B. ASSOCIATES



TAILWHEEL ASSEMBLY

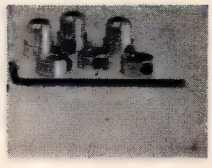
This unit is scaled to fit the current crop of .60 powered bi-planes. Spring leaves may be added or subtracted, spring steering is positive up to a 65° angle. Leaf springs shipped straight so modeler can bend to desired curvature.

CBA26000	C B TAILWHEEL ASSEMBLY #5510	7.95	6.95

FOX

WHEEL COLLARS

Sizes from 3/32-3/16. Outer collar is acorn type covering wire end. 6-40 Allen screw for tighter grip.



FOX20331	FOX #90331 COLLARS 3/32 IN (2)	.69	.65
FOX20341	FOX #90341 COLLARS 1/8 IN (2)	.69	.65
FOX20351	FOX #90351 COLLARS 5/32 IN (2)	.69	.65
FOX20361	FOX #90361 COLLARS 3/16 IN (2)	.69	.65

WHEELS • DU-BRO •WHEELS

BIG WHEELS

A WHOLE NEW LINE OF SMOOTH INFLATABLE

4", 4½", 5", 5½" & 6"



Smooth, inflatable wheels for those big airplanes. Features two piece bolt together hubs and hub caps. Wheels can be inflated (or deflated) thru a tiny valve in the side of the tire to the pressure you desire. Truly a remarkable, realistic looking wheel

400R	4" Diameter
450R	4-1/2" Diameter
500R	5" Diameter
550R	5-1/2" Diameter
600R	6" Diameter



TREAD (T) SMOOTH (R) SLICKS (S)

Low bounce, shock absorbing wheels featuring the 6 spoke dura hub are of finest quality and are hand inspected.

1.75 T or R	Wheels 1-3/4"
2.00 T or R	Wheels 2"
2.25 T, R or S	Wheels 2-1/4"
2.50 T, R or S	Wheels 2-1/2"
2.75 T, R or S	Wheels 2-3/4"
3.00 T, R or S	Wheels 3"
3.25 T or R	Wheels 3-1/4"
3.50 T or R	Wheels 3-1/2"

OTHER DUBRO WHEEL ACCESSORY ITEMS:

WHEEL COLLARS — PAGE 161
WHEEL BRAKE — PAGE 161

DUB21111	DUBRO WHEEL 1 ONLY 175R 1 3/4	1.45	1.30
DUB21112	DUBRO WHEEL 1 ONLY 200R 2 IN.	1.55	1.40
DUB21113	DUBRO WHEEL 1 ONLY 225R 2 1/4	1.70	1.55
DUB21114	DUBRO WHEEL 1 ONLY 250R 2 1/2	1.80	1.60
DUB21115	DUBRO WHEEL 1 ONLY 275R 2 3/4	1.90	1.70
DUB21116	DUBRO WHEEL 1 ONLY 300R 3 IN.	2.05	1.85
DUB21117	DUBRO WHEEL 1 ONLY 325R 3 1/4	2.15	1.95
DUB21118	DUBRO WHEEL 1 ONLY 350R 3 1/2	2.30	2.10
DUB21121	DUBRO WHEEL 1 ONLY 175T 1 3/4	1.45	1.30
DUB21122	DUBRO WHEEL 1 ONLY 200T 2 IN.	1.55	1.40
DUB21123	DUBRO WHEEL 1 ONLY 225T 2 1/4	1.70	1.55
DUB21124	DUBRO WHEEL 1 ONLY 250T 2 1/2	1.80	1.60
DUB21125	DUBRO WHEEL 1 ONLY 275T 2 3/4	1.90	1.70
DUB21126	DUBRO WHEEL 1 ONLY 300T 3 IN.	2.05	1.85
DUB21127	DUBRO WHEEL 1 ONLY 325T 3 1/4	2.15	1.95
DUB21128	DUBRO WHEEL 1 ONLY 350T 3 1/2	2.30	2.10
DUB21143	DUBRO WHEEL 1 ONLY 225S 2 1/4	1.70	1.55
DUB21144	DUBRO WHEEL 1 ONLY 250S 2 1/2	1.80	1.60
DUB21145	DUBRO WHEEL 1 ONLY 275S 2 3/4	1.90	1.70
DUB21146	DUBRO WHEEL 1 ONLY 300S 3 IN.	2.05	1.85
DUB21152	DUBRO WHEEL 1 ONLY 400R 4 IN.	3.98	3.95
DUB21154	DUBRO WHEEL 1 ONLY 450R 4 1/2	4.98	4.95
DUB21156	DUBRO WHEEL 1 ONLY 500R 5 IN.	5.98	5.95
DUB21158	DUBRO WHEEL 1 ONLY 550R 5 1/2	6.98	6.95
DUB21160	DUBRO WHEEL 1 ONLY 600R 6 IN.	7.98	7.95
DUB21211	DUBRO WHEELS-PAIR 175R 1 3/4	2.40	2.15
DUB21212	DUBRO WHEELS-PAIR 200R 2 IN.	2.60	2.35
DUB21213	DUBRO WHEELS-PAIR 225R 2 1/4	2.80	2.50
DUB21214	DUBRO WHEELS-PAIR 250R 2 1/2	2.99	2.70
DUB21215	DUBRO WHEELS-PAIR 275R 2 3/4	3.20	2.90
DUB21216	DUBRO WHEELS-PAIR 300R 3 IN.	3.40	3.05
DUB21217	DUBRO WHEELS-PAIR 325R 3 1/4	3.60	3.25
DUB21218	DUBRO WHEELS-PAIR 350R 3 1/2	3.80	3.40
DUB21221	DUBRO WHEELS-PAIR 175T 1 3/4	2.40	2.15
DUB21222	DUBRO WHEELS-PAIR 200T 2 IN.	2.60	2.35
DUB21223	DUBRO WHEELS-PAIR 225T 2 1/4	2.80	2.50
DUB21224	DUBRO WHEELS-PAIR 250T 2 1/2	2.99	2.70
DUB21225	DUBRO WHEELS-PAIR 275T 2 3/4	3.20	2.90
DUB21226	DUBRO WHEELS-PAIR 300T 3 IN.	3.40	3.05
DUB21227	DUBRO WHEELS-PAIR 325T 3 1/4	3.60	3.25
DUB21228	DUBRO WHEELS-PAIR 350T 3 1/2	3.80	3.40
DUB21243	DUBRO WHEELS-PAIR 225S 2 1/4	2.80	2.50
DUB21244	DUBRO WHEELS-PAIR 250S 2 1/2	3.00	2.70
DUB21245	DUBRO WHEELS-PAIR 275S 2 3/4	3.20	2.90
DUB21246	DUBRO WHEELS-PAIR 300S 3 IN.	3.40	3.05
DUB21252	DUBRO WHEELS-PAIR 400R 4 IN.	7.95	7.25
DUB21254	DUBRO WHEELS-PAIR 450R 4 1/2	9.95	8.95
DUB21256	DUBRO WHEELS-PAIR 500R 5 IN.	11.95	10.75
DUB21258	DUBRO WHEELS-PAIR 550R 5 1/2	13.95	12.50
DUB21260	DUBRO WHEELS-PAIR 600R 6 IN.	15.95	14.25
DUB20137	DUBRO 137 DURA COLLARS 1/16(4)	.80	.75
DUB20139	DUBRO 139 DURA COLLARS 1/8 (4)	.80	.75
DUB20140	DUBRO 140 DURA COLLARS 5/32(4)	.80	.75
DUB20141	DUBRO 141 DURA COLLARS 3/16(4)	.80	.75
DUB20157	DUBRO 157 FRICTION BRAKE- NOSE	2.95	2.65

GOLDBERG



CG LOW BOUNCE WHEELS

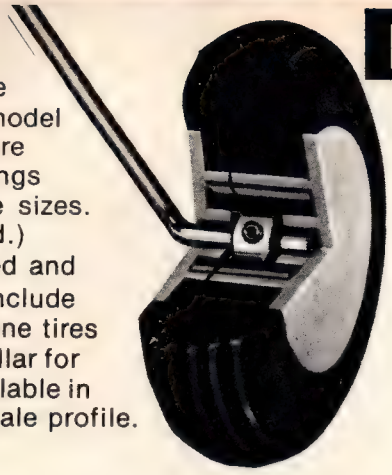
Suggested Retail Price: $1.89-$3.19

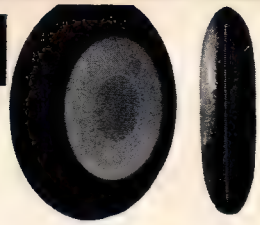
These new CG low bounce wheels have been tested and proven in the field by famous fliers. We believe you, too, will like these very attractive wheels. They have sharp, clean rib treads and tough, long-wearing hubs. Sizes 1-13/16 in. and larger accept standard brakes. Seven sizes, 1-3/8 to 3-1/8.

GBG21101	GOLDBERG W1 WHEEL(1) 1 3/8	.95	.90
GBG21102	GOLDBERG W2 WHEEL(1) 1 13/16	1.10	1.05
GBG21103	GOLDBERG W3 WHEEL(1) 2 IN.	1.20	1.15
GBG21104	GOLDBERG W4 WHEEL(1) 2 3/16	1.30	1.25
GBG21105	GOLDBERG W5 WHEEL(1) 2 9/16	1.40	1.35
GBG21106	GOLDBERG W6 WHEEL(1) 2 13/16	1.50	1.45
GBG21107	GOLDBERG W7 WHEEL(1) 3 1/8	1.60	1.55
GBG21201	GOLDBERG W1 WHEELS(2) 1 3/8	1.89	1.80
GBG21202	GOLDBERG W2 WHEELS(2) 1 13/16	2.19	2.10
GBG21203	GOLDBERG W3 WHEELS(2) 2 IN.	2.39	2.25
GBG21204	GOLDBERG W4 WHEELS(2) 2 3/16	2.59	2.45
GBG21205	GOLDBERG W5 WHEELS(2) 2 9/16	2.79	2.65
GBG21206	GOLDBERG W6 WHEELS(2) 2 13/16	2.99	2.85
GBG21207	GOLDBERG W7 WHEELS(2) 3 1/8	3.19	3.05
GBG20200	GOLDBERG WC-116 COLLARS 1/16''	.89	.85
GBG20202	GOLDBERG WC-332 COLLARS 3/32''	.89	.85
GBG20204	GOLDBERG WC-180 COLLARS 1/8''	.89	.85
GBG20206	GOLDBERG WC-532 COLLARS 5/32''	.89	.85
GBG20208	GOLDBERG WC-316 COLLARS 3/16''	.89	.85
GBG22005	GOLDBERG AA1 ADJUSTABLE AXLE	.75	.70
GBG26101	GOLDBERG TB1 TAILWHEEL BRACKET	.40	.37

KRAFT

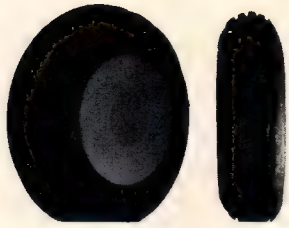
Kraft high-quality hidden axle wheels are designed for general model airplane use and feature interchangeable bushings for three common axle sizes. (No drilling is required.) These easily-assembled and true-running wheels include puncture-proof Neoprene tires and a hidden wheel collar for scale appearance. Available in either streamline or scale profile.





STREAMLINE PROFILE

DIAMETER	PART NUMBER
1¾"	200-099
2"	200-080
2¼"	200-081
2½"	200-082
2¾"	200-083



SCALE PROFILE

DIAMETER	PART NUMBER
1½"	200-073
1¾"	200-074
2"	200-075
2¼"	200-076
2½"	200-077
2¾"	200-078
3"	200-079

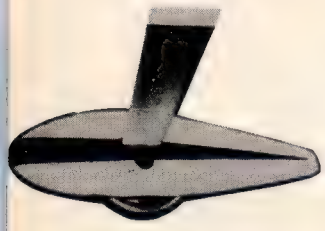
KRA21273	KRAFT 200-073 SCL WHEELS 1 1/2	2.79	2.60
KRA21274	KRAFT 200-074 SCL WHEELS 1 3/4	2.99	2.80
KRA21275	KRAFT 200-075 SCL WHEELS 2	3.19	3.00
KRA21276	KRAFT 200-076 SCL WHEELS 2 1/4	3.39	3.15
KRA21277	KRAFT 200-077 SCL WHEELS 2 1/2	3.39	3.15
KRA21278	KRAFT 200-078 SCL WHEELS 2 3/4	3.79	3.50

KRA21279	KRAFT 200-079 SCL WHEELS 3	3.99	3.70
KRA21280	KRAFT 200-080 SLM WHEELS 2	3.39	3.15
KRA21281	KRAFT 200-081 SLM WHEELS 2 1/4	3.79	3.50
KRA21282	KRAFT 200-082 SLM WHEELS 2 1/2	3.99	3.70
KRA21283	KRAFT 200-083 SLM WHEELS 2 3/4	3.99	3.70
KRA21299	KRAFT 200-099 SLM WHEELS 1 3/4	3.19	3.00

JOINED EPOXY WHEEL PANTS

PRATHER

ALUMINUM RACING WHEELS



The Prather Fiberglass Epoxy Wheels Pants are aerodynamically designed to reduce drag. They are made to fit on dural gear and are easy to install. Wheel pants weigh less than 1 oz. each yet are extremely strong. Complete with axle retainer, flat head socket cap screws and allen wrench.



SIZE: 2¼" DIA.

The Prather slimline racing wheels are machined from bar stock aluminum. They are equipped with tough rubber tires. Each wheel weighs less than 1 oz. Designed for low drag that is needed in pylon racing.

NOSE WHEEL BRAKE



This type of front wheel brake is used by many of the top pattern flyers. It is simple and easy to hook up, no springs or catches to cause you trouble.
Our brake works every time, by pressure on the front tire. Complete brake and linkage assembly included.

AXLE RETAINERS



These new type axle retainers are designed to hold wheels firmly on dural gear. They work excellent for flush mounting of wheels pants. Comes complete with flat head socket cap screws and allen wrench.

PRA21390	PRATHER #139 RACING WHEELS	5.95	5.50
PRA21400	PRATHER #140 EPOXY WHEEL PANTS	9.95	9.50
PRA21410	PRATHER #141 AXLE RETAINERS	1.98	1.90
PRA21470	PRATHER #147 NOSEWHEEL BRAKE	1.49	1.45

SONIC-SYSTEMS



PNEUMATIC DISC BRAKE FROM SONIC SYSTEMS

A reliable approach to the problem of wheel brakes for model aircraft, and with additional application in racing cars, is the new TaxiMaster air operated disc brake system, according to the manufacturer, Sonic Systems, P.O. Box 192, Whippany, New Jersey 07981.

Sonic Systems claims that TaxiMaster provides positive stopping power for planes weighing up to 15 pounds, though it suggests two brake units on the main gear for craft weighing more than 8 pounds. For tail draggers, Sonic suggests that two control valves be installed and operated by "left" or "right" on the rudder servo. For trike gears, the brake control valve should be operated by the last 1/16" of elevator servo arm on the "down" elevator side.

The brake assembly comprises two basic parts: a disc whose hub engages the spokes on many 2½" and larger six-spoke wheels (including Kavan, Goldberg, Du-Bro and Royal); and a backing plate which is actually a shallow air cylinder and dual ring piston with a cork face. The piston is keyed to the cylinder to prevent rotation and the cork face is oiled (engine oil will not impair its efficiency).

The cylinder is secured to the 5/32" axle by a lock screw. When assembled on the axle and pushed together, the cylinder is filled by the piston, thus reducing air consumption to that which is in the line from the control valve.

The pressure tubing is small and flexible, and can be neatly routed down the strut by inserting a piece of .050 music wire that has been bent to shape.

SOS20000	SONIC-SYSTEMS TM1 DISC BRAKE	15.95	12.75

MILMAN

SCALE AND STAND-OFF SCALE SPOKE WHEELS



Vintage, wire-spoked wheels which are precision built—look authentic and delicate, but take the abuse of any RC application. Foam tires, treaded or smooth, nylon bushings, and formed steel rims and steel spokes beautifully nickel-plated make them the perfect accessory for any scale or stand-off scale model. Milman Spokes are available 2-3/8 to 5 in., making them perfect for a wide range of aircraft models. Finish off your scale model right—with spokes!

MIL21237	MILMAN WHEELS #237-T 2 3/8 IN	23.25	22.25
MIL21238	MILMAN WHEELS #237-S 2 3/8 IN	22.00	21.00
MIL21262	MILMAN WHEELS #262-T 2 5/8 IN	24.25	23.25
MIL21263	MILMAN WHEELS #262-S 2 5/8 IN	22.00	21.00
MIL21325	MILMAN WHEELS #325-T 3 1/4 IN	25.50	24.50
MIL21326	MILMAN WHEELS #325-S 3 1/4 IN	24.25	23.25
MIL21350	MILMAN WHEELS #350-T 3 1/2 IN	25.50	24.50
MIL21351	MILMAN WHEELS #350-S 3 1/2 IN	24.25	23.25
MIL21437	MILMAN WHEELS #437-T 4 3/8 IN	26.50	25.50
MIL21438	MILMAN WHEELS #437-S 4 3/8 IN	25.50	24.50
MIL21462	MILMAN WHEELS #462-T 4 5/8 IN	26.50	25.50
MIL21463	MILMAN WHEELS #462-S 4 5/8 IN	25.50	24.50
MIL21475	MILMAN WHEELS #475-T 4 3/4 IN	27.50	26.50
MIL21476	MILMAN WHEELS #475-S 4 3/4 IN	26.50	25.50
MIL21500	MILMAN WHEELS #500-T 5 IN	27.50	26.50
MIL21501	MILMAN WHEELS #500-S 5 IN	26.50	25.50

ROCKET CITY

EASY ACTION WHEEL BRAKES

2 brakes per package
#RCS20004



RCS20004	ROCKET CITY #04 WHEEL BRAKES	3.00	2.80

ROBART

scale wheels

UNIVERSAL



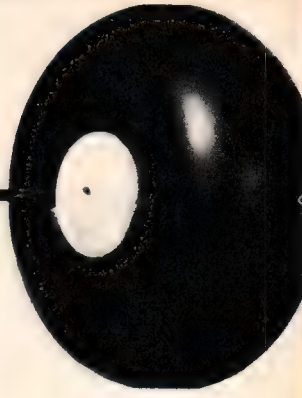
THE WHEEL THAT ENDS SCALE PROBLEMS ON ALMOST ALL SUBJECTS FROM 1930 ONWARD AND WILL BE AT HOME ON ANY CONTEST OR SPORT SHIP.

ROB21125	ROBART U250-1 ONLY 2-1/2 IN	2.50	2.45
ROB21127	ROBART U275-1 ONLY 2/3/4 IN	2.60	2.55
ROB21130	ROBART U300-1 ONLY 3 IN	2.75	2.70
ROB21132	ROBART U325-1 ONLY 3-1/4 IN	2.90	2.85
ROB21135	ROBART U350-1 ONLY 3-1/2 IN	3.10	3.05
ROB21137	ROBART U375-1 ONLY 3-3/4 IN	3.30	3.25
ROB21225	ROBART U250 PAIR 2-1/2 IN	4.99	4.50
ROB21227	ROBART U275 PAIR 2-3/4 IN	5.19	4.65
ROB21230	ROBART U300 PAIR 3 IN	5.49	4.95
ROB21232	ROBART U325 PAIR 3-1/4 IN	5.79	5.20
ROB21235	ROBART U350 PAIR 3-1/2 IN	6.19	5.65
ROB21237	ROBART U375 PAIR 3-3/4 IN	6.59	5.95

TREXLER

Made of the finest latex rubber, these wheels offer toughness and long life. The only model airplane wheels that are inflatable — make them as bouncy as you like. Use inflater air pump. 4 sizes sold in pairs only.

This Valve Makes Them Superior



TRX20001	TREXLER AIR PUMP	3.50	3.30
TRX21275	TREXLER WHEELS PAIR 2 3/4 IN	5.00	4.50
TRX21300	TREXLER WHEELS PAIR 3 IN.	6.00	5.40
TRX21350	TREXLER WHEELS PAIR 3 1/2 IN.	7.00	6.30
TRX21450	TREXLER WHEELS PAIR 4 1/2 IN.	8.00	7.20

WILLIAMS BROS.

Scale Wheels

NOTE: The smooth contour is stocked only in ¾" to 1½" diameter as they are used mostly as tail wheels.



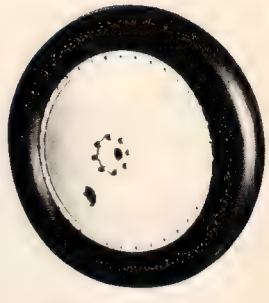
SMOOTH CONTOUR

This type of wheel and tire was popular from the late 30's through early World War II. Semi-pneumatic tires. Sizes range from ¾" to 5¼" diameter.



VINTAGE AIRCRAFT

Typical of the high-pressure type used during World War I and on to the mid '30s. Available in sizes ranging from ¾" to 5" diameter.



GOLDEN AGE

Disc type wheel extensively employed from the late 20s through early 30s. Sizes range from ¾" to 5" diameter.

WBR21124	VINTAGE WHEELS 124 3/4 IN	.70	.65
WBR21125	VINTAGE WHEELS 125 1 IN	.80	.75
WBR21126	VINTAGE WHEELS 126 1-1/4 IN	.80	.75
WBR21127	VINTAGE WHEELS 127 1-1/2 IN	1.20	1.15
WBR21128	VINTAGE WHEELS 128 1-7/8 IN	2.00	1.80
WBR21129	VINTAGE WHEELS 129 2-1/2 IN	3.25	2.95
WBR21130	VINTAGE WHEELS 130 3-1/8 IN	5.20	4.40
WBR21131	VINTAGE WHEELS 131 3-3/4 IN	6.85	5.80
WBR21132	VINTAGE WHEELS 132 4-3/8 IN	8.20	6.95
WBR21133	VINTAGE WHEELS 133 5 IN	9.85	8.35
WBR21136	SM CONTOUR WHEELS 136 3/4 IN	.70	.65
WBR21137	SM CONTOUR WHEELS 137 1 IN	.80	.75
WBR21138	SM CONTOUR WHEELS 138 1-1/4 IN	.95	.90
WBR21139	SM CONTOUR WHEELS 139 1-1/2 IN	1.20	1.15
WBR21146	GOLDEN AGE WHEELS 146 3/4 IN	.70	.65
WBR21147	GOLDEN AGE WHEELS 147 1 IN	.80	.75
WBR21148	GOLDEN AGE WHEELS 148 1-1/4 IN	.95	.90
WBR21149	GOLDEN AGE WHEELS 149 1-1/2 IN	1.20	1.15
WBR21150	GOLDEN AGE WHEELS 150 1-7/8 IN	2.00	1.90
WBR21151	GOLDEN AGE WHEELS 151 2-1/2 IN	3.25	2.95
WBR21152	GOLDEN AGE WHEELS 152 3-1/8 IN	5.20	4.40
WBR21153	GOLDEN AGE WHEELS 153 3-3/4 IN	6.85	5.80
WBR21154	GOLDEN AGE WHEELS 154 4-3/8 IN	8.20	6.95
WBR21155	GOLDEN AGE WHEELS 155 5 IN	9.85	8.35

WING KITS

Occasionally we dump one in, but then arrive at the crater amazed to see that the plane has emerged nearly unscathed — but the wing is totalled. It cannot be repaired . . . so what do we do?

Since wings seem to be the parts of the airplane that get damaged the most, Tower Hobbies carries a large assortment of replacement wing kits. These kits come in either all-wood, or foam wings with a covering.

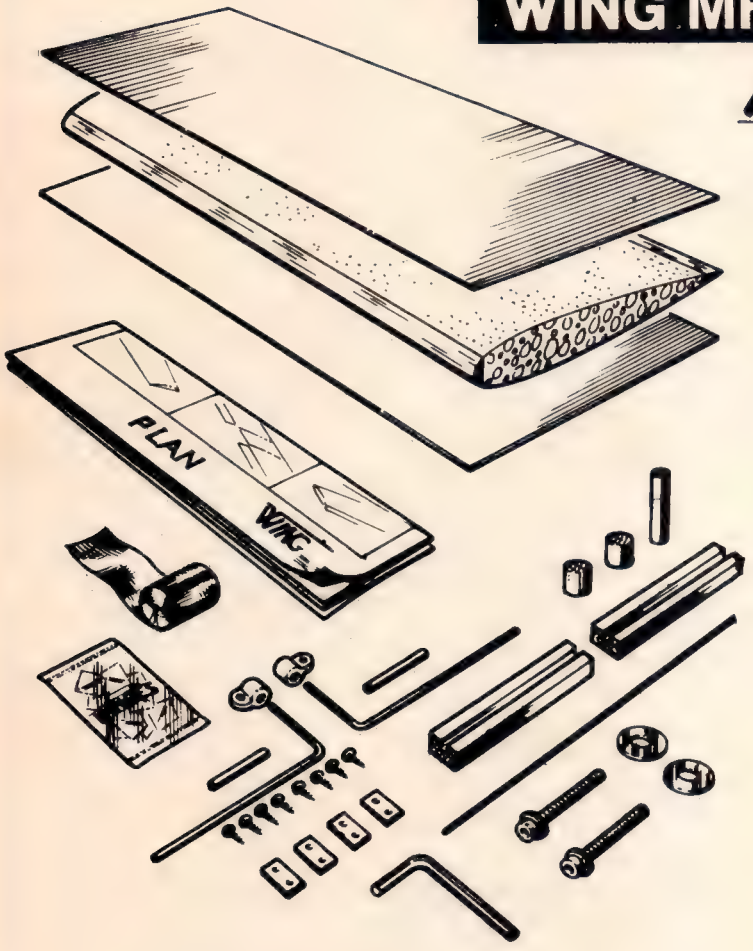
The all-wood wing kits are made by the manufacturers as replacements for the kits they make. Both Carl Goldberg models and Jensen make wing kits for their planes. These wings are identical to the wings in the full-airplane kit.

If you have another type of aircraft, you're not out of luck. Wing manufacturing makes foam wing kits for a veritable multitude of airplanes. Foam wings have an advantage in that they are quickly built, and also that they are inexpensive.

If you have not built a foam wing, never fear. Wing provides complete directions for the covering and assembly of the wings they provide. All you need is some Southern R/C Sorghum, Goldberg Blue Goo, or some Wilhold spray adhesive for applying the sheeting; and some Hobbypoxy Formula II or Southern R/C Mix-a-matic epoxy for joining and strapping the center joint.

WING MFG. CO.

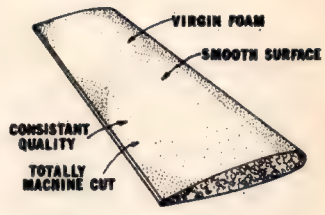
We've got the wing your looking for



Building a straight wing isn't easy and it takes a lot of time and patience. Our wing kits solve this by offering fast and easy assembly plus the additional strength of foam and stress skin construction. If you have a favorite ship that needs a new wing or are building a new bird, try one of our wings.

REPLACEMENT WING KITS FEATURE:

- The finest grade virgin bead foam accurately cut on our scientifically designed machinery.
- High density bond board Wing Skins — easy to put on and finish .018 thickness.
- Fiberglass reinforcement cloth for joining center section.
- Hinges & balsa leading & trailing edges as required.
- Aileron Linkages furnished for Strip Aileron Wings.
- Illustrated step by step instruction plan.
- Nylon wing hold down bolts with wrench & washers.
- Copper cutting wire for making cut-outs.
- Wing tips and Aileron material not included.



FREE WING LOADING CHART IN EVERY KIT

YOU GET PRECISION CUT CORES, BALSA LEADING AND TRAILING EDGES (WHERE REQUIRED), WING SKINS, HINGES, HOLD DOWN BOLTS, LANDING GEAR BLOCKS AND DOWELS (WHERE REQUIRED), REINFORCEMENT TAPE FOR CENTER JOINT, STRIP AILERON LINKAGE ASSEMBLY (WHERE REQUIRED), COPPER WIRE FOR MAKING SERVO CUTOUTS ETC., AND COMPLETE STEP BY STEP ILLUSTRATED CONSTRUCTION PLAN.

WIN21212	WING INSTALLATION KIT #212	3.78	3.60
WIN75101	WING FOAM WING RCM TRAINER 60	15.95	14.25
WIN75102	WING FOAM WING BASIC TRAINER	10.95	9.75
WIN75103	WING FOAM WING QUICKIE 500	10.95	9.75
WIN75104	WING FOAM WING MAN TRAINER 40	10.95	9.75
WIN75105	WING FOAM WING RCM TRAINER 40	10.95	9.75
WIN75201	WING FOAM WING LITTLE STICK	10.95	9.75
WIN75202	WING FOAM WING UGLY STICK	15.95	14.25
WIN75203	WING FOAM WING SWEET STICK	10.95	9.75
WIN75205	WING FOAM WING FLEDGLING	10.95	9.75
WIN75206	WING FOAM WING SR. FALCON	15.95	14.25
WIN75207	WING FOAM WING FALCON 56	10.95	8.75
WIN75208	WING FOAM WING SKYLARK	10.95	9.75
WIN75209	WING FOAM WING A-RAY	10.95	9.75
WIN75210	WING FOAM WING H-RAY	10.95	9.75
WIN75211	WING FOAM WING SUPER KAOS 40	10.95	9.75
WIN75212	WING FOAM WING SKYLANE 62	16.95	14.95
WIN75215	WING FOAM WING CONTENDER	15.95	14.25
WIN75216	WING FOAM WING GAZARIATOR	15.95	14.25
WIN75217	WING FOAM WING HEADMASTER	10.95	9.75
WIN75218	WING FOAM WING TRAINERMASTER	10.95	9.75
WIN75219	WING FOAM WING SIG KADET	10.95	9.75
WIN75220	WING FOAM WING BOX FLY	10.95	9.75
WIN75221	WING FOAM WING JR BOX FLY	10.95	9.75
WIN75223	WING FOAM WING MEN TRAINER	13.95	12.50
WIN75224	WING FOAM WING BRIDI SUN FLI	10.95	9.75
WIN75301	WING FOAM WING KAOS	15.95	14.25
WIN75303	WING FOAM WING MACH-1	15.95	14.25
WIN75304	WING FOAM WING KWIK FLY-TAPERD	15.95	14.25
WIN75305	WING FOAM WING SUPER KAOS 60	15.95	14.25
WIN75306	WING FOAM WING STRIKEMASTER	15.95	14.25
WIN75307	WING FOAM WING SPORTMASTER	15.95	14.25
WIN75309	WING FOAM WING PHOENIX-6	15.95	14.25
WIN75310	WING FOAM WING SIG KOMET	15.95	14.25
WIN75311	WING FOAM WING DIRTY BIRDY	15.95	14.25
WIN75501	WING FOAM WING T. F. P-40	15.95	14.25
WIN75502	WING FOAM WING T. F. P-39	15.95	14.25
WIN75503	WING FOAM WING T-F P-51	16.95	14.95
WIN75504	WING FOAM WING PLATT T-28 B	18.95	16.75
WIN75505	WING FOAM WING PLATT FW-190	18.95	16.75
WIN75701	WING FOAM WING AEROMASTER	18.95	16.75

DU-BRO

THE FINAL FILTER

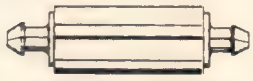


ONLY 1¼" LONG
FILTERS IN EITHER DIRECTION



CLEAN BY BACK FLUSHING.

The ultimate, in-line fuel filter with twice as much fuel filtering capacity as most filters now available. The extremely fine 130 micron polyester screen filters out even the smallest particles, yet, because of the large filtering area, it does not restrict fuel flow. Proven 20% better than wire screen equivalents, this classy looking aluminum filter should be used between engine and tank or on your fuel can line.



ACTUAL SIZE

CAT. NO. 162
ONLY
$1.75

NOTHING GETS PAST THE FINAL FILTER!

NEW DU-BRO 1/2A MODEL ACCESSORIES

MINI-KWIK LINKS

CAT. NO. 228
2 FOR **39¢**

- SMALL AND STRONG ONLY 3/4" LONG!
- SNAPS SHUT AND LOCKS IN PLACE TO PREVENT ACCIDENTAL OPENING UNDER HEAVY STRESS LOADS
- SELF-THREADING TO FIT 2-56 RODS OR COUPLERS

1/2 A CONTROL HORNS

- 3/4" LONG - 4 ADJUSTMENT POSITIONS
- EACH SET CONTAINS 1 RIGHT AND 1 LEFT CONTROL HORN FOR SAFER INSTALLATIONS



ENABLES YOU TO MOUNT A HORN SAFELY ON EITHER SIDE OF ELEVATOR WHILE KEEPING THE MOUNTING HOLES FURTHEST FROM THE EDGE

CAT. NO. 107
2 SETS **49¢**

MINI-NY-STEEL PUSHROD ASSEMBLY



- NO-SHRINK, NO-STRETCH, FREE RUNNING PUSHROD ASSEMBLY - PERFECT FOR 1/2 A AIRPLANES. LIGHTWEIGHT, FLEXIBLE AND STRONG
- TRIM SETTINGS ARE NOT AFFECTED BY WEATHER CONDITIONS
- NEW SPRING-THREAD COUPLERS AT BOTH ENDS FOR MICRO TRIM ADJUSTMENTS *(SEE OTHER SIDE)* CAT NO. 113 2 COMPLETE SETS **$1.49**

ALSO AVAILABLE

MINI-KWIK-LINKS ON 12", 2-56 THREADED RODS

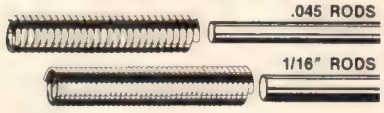
SKIN PACKED 5 PER CARD
CAT. NO. 230.
BENDABLE AND STRONG
5 FOR $1.39

AVAILABLE SEPARATELY PACKAGED 18 PER TUBE
CAT. NO. 229 ONLY 29¢ EACH
TUBE PRICE $5.22

DU-BRO

SPRING-THREAD COUPLERS

NEW!



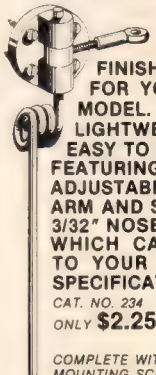
A NEW, EASY WAY FOR YOU TO PUT THREADS ON ANY ROD, WIRE OR CABLE UP TO 1/16" DIAMETER.

MAKES A SMALL, CLEAN LOOKING SOLDER-ON CONNECTOR FOR ANY DU-BRO SELF THREADING NYLON LINK OR BALL LINK.

CAT. NO. 232 FOR .045 WIRE OR SMALLER.
CAT. NO. 233 FOR 1/16" WIRE OR SMALLER.

ACTUAL SIZE 10 FOR **39¢**

1/2A STEERABLE NOSE GEAR



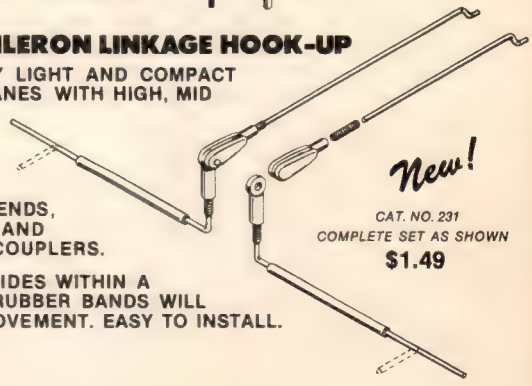
THE FINISHING TOUCH FOR YOUR 1/2A MODEL. SMALL, LIGHTWEIGHT AND EASY TO INSTALL, FEATURING AN ADJUSTABLE STEERING ARM AND STRAIGHT 3/32" NOSE GEAR WIRE WHICH CAN BE BENT TO YOUR SPECIFICATIONS.

CAT. NO. 234
ONLY **$2.25**

COMPLETE WITH MOUNTING SCREWS

1/2A STRIP AILERON LINKAGE HOOK-UP

MADE ESPECIALLY LIGHT AND COMPACT FOR 1/2 A AIRPLANES WITH HIGH, MID OR LOW WINGS.



FEATURES OUR NEW NYLON ROD ENDS, MINI-KWIK-LINKS AND SPRING-THREAD COUPLERS.

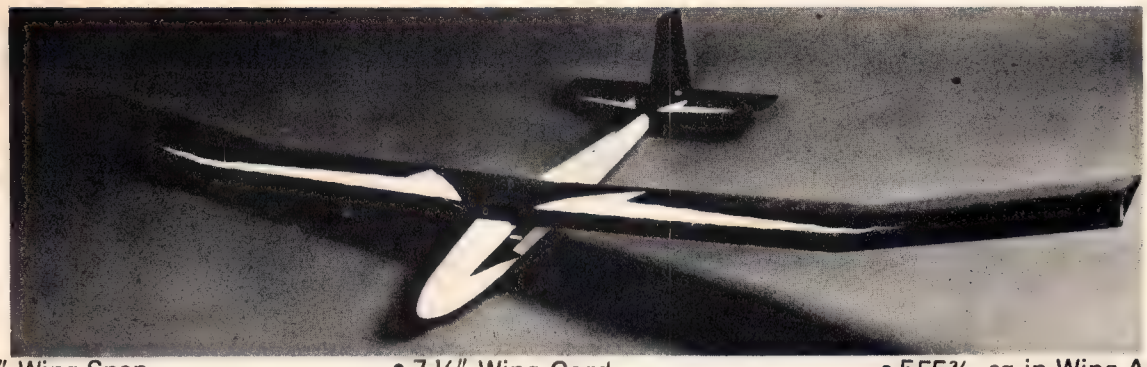
AILERON WIRE RIDES WITHIN A BRASS TUBE SO RUBBER BANDS WILL NOT RESTRICT MOVEMENT. EASY TO INSTALL.

New!

CAT. NO. 231
COMPLETE SET AS SHOWN
$1.49

DUB20107	DUBRO 107 1/2A CONTROL HORNS	.49	.47
DUB20113	DUBRO 113 MINI PUSHROD ASSMBLY	1.49	1.40
DUB20162	DUBRO 162 FINAL FILTER	1.75	1.65
DUB20228	DUBRO 228 MINI KWIK LINKS (2)	.39	.37
DUB20229	DUBRO 229 MINI LINK W/ROD (1)	.29	.27
DUB20230	DUBRO 230 MINI LINK W/ROD (5)	1.39	1.35
DUB20231	DUBRO 231 1/2A STRIP AIL LINK.	1.49	1.45
DUB20232	DUBRO 232 SPRING COUPLERS .045	.39	.37
DUB20233	DUBRO 233 SPRING COUPLERS 1/16	.39	.37
DUB20234	DUBRO 234 1/2A STEER. NOSE GR.	2.25	2.15

BRIDI SOAR BIRDY



• 78" Wing Span • 7 ⅛" Wing Cord • 555¾ sq in Wing Area

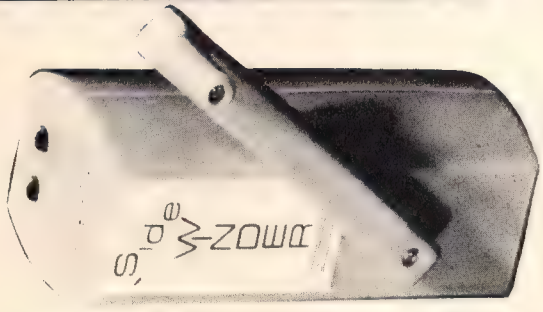
The Bridikit Soar Birdi is all balsa construction. Utilizing a polyhedral wing with a flat bottom airfoil, the ribs, bulkheads, rudder, fin, stab, and elevator halves are machine cut. For rugged construction, a machine cut plywood floor, and fuselage side doublers and hardwood spars are provided. Designed to accept a brick or servos, an .049 engine may be mounted on the nose utilizing an additional ply bulkhead provided in the kit.

BRI71100 BRIDI SOAR BIRDY GLIDER 19.95 15.95

SONIC-TRONICS

NEW

Side WINDER HAND PUMP



The "Best in High Performance Hand Operated Fuel Pumps is available to you Now! Made of High Strength Nylon, Pump both Fills & Empties your tank plus it Hangs on the side of your fuel can when not in use.

Stk. No# 160,

STR54160 STR #160 SIDEWINDER HAND PUMP 8.95 7.60

PRATHER

"NEW AND DIFFERENT"

Miracle Micro-Balloons



It's a miracle because our micro-balloon does everything you want a filler to do and is snow white in color.

- **Smooth fine grain (No lumps)**
- **Sands easily**
- **Strong without being brittle**
- **Easy pour container**
- **Snow white in color**

I feel our micro-balloon is the best available. The easy pour container makes it a snap to use.

Terry Prather

PRA21030 PRATHER MIRACLE MICRO BALLOONS 1.98 1.90

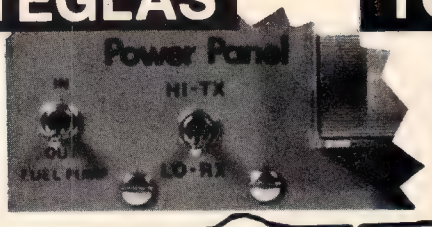
DA ENTERPRISES

DA ENTERPRISES — The Dual Range and the Series IV Power Panels are now available with a new fuel pump switch that allows you to reverse the polarity to your pump. See Page 210 for standard versions for operating specifications.

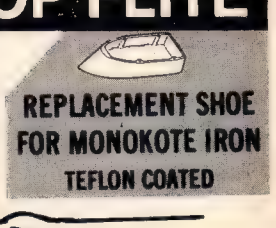
FLITEGLAS — Pneumatic retract landing gear speed reducers simply install in freon lines to slow operation. 6 reducers per package.

TOP FLITE — Replacement teflon shoe for their Monokote iron. Replaces original shoe exactly.

FLITEGLAS



TOP FLITE





DAE90001	DAE 7800 PUMP SWITCH-SERIES IV	37.95	28.95
DAE90413	DAE 7805 PUMP SWTCH-DUAL RANGE	27.95	22.35
FLI22000	FLITEGLAS SPEED REDUCERS (6)	5.95	5.35
TOP45302	TOP FLITE IRON REPLACMENT SHOE	3.50	3.15

PRICE LISTING SECTION

This PRICE LISTING SECTION lists every item that is pictured, listed, or referred to in the illustrated pages of this catalog. For each item a Tower Stock Number, a brief description, the retail price, the Tower price, and the page number where the item can be found in the illustrated sections of the catalog is given.

HOW TO USE THIS SECTION

As you are looking through the fully illustrated pages of this catalog you will find that on each page or in each manufacturer's section there is a line or block of lines that gives the stock number, description, retail price, and Tower price for the item(s) on that page. This product price listing information is repeated here in this section along with all the other price listings on all other pages to form a complete listing of every product contained in this catalog.

In addition, each item line in this section has the page number where you can find the product within the fully illustrated section of the catalog. This gives you just one more index to use in conjunction with the Manufacturer's index (page 3) and the Product index (page 4 and 5) to help you find what you're looking for.

If you're "browsing" around, then the illustrated pages are the way to shop. If you know exactly what you want and which manufacturer makes it, then flipping to this section is the easiest and fastest way to look up stock numbers and prices. The choice is yours-as it should be!

TOWER STOCK NUMBERS

All Tower Hobbies Stock Numbers are made up of three letters and five numbers. The three letters are an abbreviation of the manufacturer's name. The five numbers distinguish between items of that manufacturer's line. A complete list of every manufacturer we carry is listed below along with their three letter abbreviations.

Please use these stock numbers when ordering, either by phone or by mail, as this will allow us to process your order much faster and with far less chance of a mistake.

HOW TO ORDER

Please consult the ordering instructions on Page 284 and then use the order forms on Pages 285 and 287.

INDEX OF MANUFACTURERS

Ace R/C . . . . . ACE
Aerotrend . . . . . AER
Airborne Mfg. . . . . AAS
Air-Forms . . . . . AFM
Airtronics . . . . . AIR
A-Justo-Jig . . . . . AJJ
Ambroid . . . . . AMB
American R/C . . . . . ARC
Andrews . . . . . AND
Associated . . . . . ASC
Astro Flight (AFI) . . . AFI
B&D . . . . . B&D
B&E . . . . . BRI
Badger . . . . . BAD
Banner . . . . . BAN
Bauer . . . . . BAU
Bolink . . . . . BOL
Bridi . . . . . BRI
CB Associates . . . . . CBA
Concept Models . . . . CON
Coverite . . . . . COV
Cox . . . . . COX
Craft-Air . . . . . CRA
Custom Model Prod. . . CMP
D&R . . . . . D&R
DA Enterprises . . . . DAE
Devcon . . . . . DEV
Dodgson Design . . . . DOD
Dremel . . . . . DRE
Du-Bro . . . . . DUB
Dumas . . . . . DUM
Econokote . . . . . ECO
Edson . . . . . EDS
Enya . . . . . ENY
Eveready . . . . . EVE
Exhib'Air . . . . . EXH
Fox . . . . . FOX
Fusite (GloBee) . . . . . FUS
Futaba . . . . . FUT
Gas Model Products . . GAS
Gee Bee . . . . . GBE
GMC Models . . . . . GMC
Goldberg . . . . . GBG
Grish Bros. . . . . GRI
Hallco . . . . . HAL
H.B. Engines . . . . . HBE
Hobbypoxy . . . . . HOB
Hot Stuff . . . . . HOT
House of Balsa . . . . HOU
Jemco . . . . . JEM
Jensen . . . . . JEN
K&B . . . . . K&B
Kavan . . . . . KAV
Kraft . . . . . KRA
Lanier . . . . . LAN
Latrax . . . . . LAT
Leisure . . . . . LEI
Lexan (Associated) . . ASC
Marks Models . . . . . MAR
Master-Kit . . . . . MAS
M.E.N. . . . . MEN
Michigan Hobby . . . MHH
Microflame . . . . . MFL
Midwest . . . . . MID
Mile High Models . . . MHM
Miller . . . . . MLL
Milman . . . . . MIL
Model Dynamics . . . MOD
Monokote . . . . . MON
M.R.C. . . . . MRC
Steve Muck's . . . . . MUC
Bud Nosen Models . . . NOS
Octura . . . . . OCT
O.P.S. . . . . OPS
O.S. Max . . . . . OSM
Pacer . . . . . PCR
Pactra (Aerogloss) . . . PAC
Pactra (Formula U) . . PAC
Panavise . . . . . PAN
Peerless . . . . . PEL
Perry . . . . . PER
Pica . . . . . PLA
Platt (Pica) . . . . . PLA
Power Pacer . . . . . PWR
Powr-Mite . . . . . POW
Prather . . . . . PRA
Proctor . . . . . PRC
Quadra . . . . . QUA
R+S . . . . . R+S
R/C Buyer's Guide . . RCG
RCM Magazine . . . . RCM
Rev-Up . . . . . REV
Rhom (Rom-Air) . . . ROM
Robart . . . . . ROB
Rocket City . . . . . RCS
Rossi . . . . . ROS
Royal Products . . . . ROY
RTC Models . . . . . RTC
S&O . . . . . S&O
Sanwa (Cox) . . . . . SAN
Scozzi . . . . . SCO
Sealector . . . . . SEA
Semco . . . . . SEM
Sig Mfg. . . . . SIG
Simmons . . . . . SIM
Skyglas . . . . . SKY
Slim Line Mufflers . . . SLM
Bob Smith . . . . . SMI
Soarcraft . . . . . SOR
Solarfilm . . . . . SOL
Sonic Systems . . . . . SOS
SonicTronics . . . . . STR
Southern RC . . . . . SRC
Southwestern . . . . . SOU
Span Aero . . . . . SPA
Spickler . . . . . SPI
Sta-Brite . . . . . SSS
Stafford . . . . . STA
Sterling . . . . . STE
Sullivan . . . . . SUL
Supertigre . . . . . STG
Su-Pr-Line . . . . . SPL
Sureflite . . . . . SUR
Tarno Aero . . . . . TAR
Tatone . . . . . TAT
Titebond . . . . . TIT
Tomco . . . . . TOM
Top Flite . . . . . TOP
Tornado Props . . . . . GRI
Tower Hobbies . . . . TOW
Trexler . . . . . TRX
V.K. Models . . . . . VKK
Webra . . . . . WEB
Wescraft . . . . . WST
Wilhold . . . . . WLH
Williams Bros. . . . . WBR
Wing Mfg. . . . . WIN
World Engines . . . . . WOR
X-Acto . . . . . XAC
Zinger . . . . . ZIN

ALL PRICES LISTED IN THIS SECTION ARE CURRENT AS OF MAY 1978 AND ARE SUBJECT TO CHANGE WITHOUT NOTICE.

STOCK NO	DESCRIPTION	RETAIL PRICE	TOWER PRICE	PAGE #
AAS73000	AIRBORNE PHOENIX 7 .40 WOOD	63.50	56.95	15
AAS74100	AIRBORNE PHOENIX 7 .60 (GLASS)	134.95	114.95	15
ACE14010	ACE MM 1/2 A MOTOR MOUNT	1.19	1.15	218
ACE18005	ACE SPR1 SPINNER 1 IN.	.99	.95	255
ACE18010	ACE SPR2 SPINNER 1-5/16 IN.	1.19	1.15	255
ACE20001	ACE TAPER FOAM WING	2.95	2.85	15
ACE20002	ACE CONSTANT FOAM WING	2.95	2.85	15
ACE21050	ACE WHLS PR 1/2 IN #WH5	.35	.35	261
ACE21150	ACE WHLS PR 1-1/2 IN #WH15	1.49	1.45	261
ACE21175	ACE WHLS PR 1-3/4 IN WH175	1.49	1.45	261
ACE72100	ACE DICK'S DREAM	11.95	10.45	14
ACE72102	ACE UPSTART II	17.95	13.95	14
ACE72104	ACE 'ACE HIGH' GLIDER	19.95	15.25	96
ACE72105	ACE WHIZARD	18.95	14.50	14
ACE72107	ACE PACER	19.95	15.25	12
ACE72108	ACE MACH-NONE	19.95	15.25	12
ACE72109	ACE SUPER PACER	32.95	24.75	13
ACE72111	ACE LITTLEST STICK	3.95	3.80	14
ACE72112	ACE AEROCOMMANDER SHRIKE	29.95	22.50	13
ACE72113	ACE GUPPY 02 POWER GLIDER	8.95	7.50	14
ACE72114	ACE 50L212 ALPHA	19.95	15.25	14
ACE72200	ACE ALL STAR BIPE	24.95	17.95	14
ACE72210	ACE 50L210 1/2 A GLH II (FOAM)	16.95	13.15	14
ACE86910	ACE VARI-CHARGER (ASSEMBLED)	13.95	12.25	183
AER55100	AEROTREND TUBING 3 FT.-SMALL	1.89	1.80	226
AER55110	AEROTREND TUBING 3 FT.-MEDIUM	1.89	1.80	226
AER55120	AEROTREND TUBING 3 FT.-LARGE	1.89	1.80	226
AER55130	AEROTREND TUBING 3 FT.-X-LARGE	1.89	1.80	226
AFI09505	AFI ASTRO 05 MARINE SYS W/BATT	27.95	22.95	145
AFI09510	AFI ASTRO 10 MARINE SYS W/BATT	69.95	55.95	145
AFI09515	AFI ASTRO 15 MARINE SYS W/BATT	99.95	79.95	145
AFI09805	AFI ASTRO 05 ELEC MOTOR ONLY	9.95	7.95	145
AFI09902	AFI ASTRO 02 ELEC MOTOR W/BATT	22.95	19.95	145
AFI09905	AFI ASTRO 05 ELEC MOTOR W/BATT	44.95	35.95	145
AFI09910	AFI ASTRO 10 ELEC MOTOR W/BATT	79.95	63.95	145
AFI09915	AFI ASTRO 15 ELEC MOTOR W/BATT	99.95	79.95	145
AFI09925	AFI ASTRO 25 ELEC MOTOR W/BATT	109.95	87.95	145
AFI09942	AFI ASTRO 02 TWIN MOTORS W/BAT	29.95	23.95	145
AFI09944	AFI ASTRO 05 TWIN MOTORS W/BAT	54.95	43.95	145
AFI09946	AFI ASTRO 15 TWIN MOTORS W/BAT	125.00	99.95	145
AFI09950	AFI ASTRO 25 TWIN MOTORS W/BAT	175.00	140.00	145
AFI10000	AFI AIRCRAFT SWITCH HARNESS	4.95	4.70	184
AFI10001	AFI STD. CHARGE CORD	7.95	7.50	184
AFI10002	AFI AUTO CHARGE CORD	7.95	7.50	184
AFI10003	AFI 12 V. BATTERY CHARGER	8.95	8.50	184
AFI10004	AFI RAPID CHARGER	29.95	25.45	184
AFI10005	AFI FIELD CHARGER	39.95	32.95	184
AFI10006	AFI ANALYZER-RAPID CHARGER	38.95	31.15	209
AFI10007	AFI ELECTRONIC SPEED CONTROL	59.95	47.95	145
AFI12000	AFI 1/2A MINI-STARTER	16.95	13.25	212
AFI20111	AFI ASTRO START	44.95	35.95	231
AFI20200	AFI HEAVY DUTY HIGH START	39.95	31.95	231
AFI20222	AFI STANDARD HIGH START	34.95	27.95	231
AFI71003	AFI FOURNIER RF/4 MOTOR/GLIDER	44.95	32.60	21
AFI71005	AFI ELECTRA-FLI MOTOR/GLIDER	24.95	19.00	20
AFI71006	AFI BUSHMASTER MOTOR/GLIDER	44.95	33.75	20
AFI71007	AFI ELECTRA 225 TWIN	99.95	74.50	20
AFI71008	AFI P-68 VICTOR TWIN	44.95	35.95	20
AFI71015	AFI ASW-15 RC SAILPLANE	59.95	44.95	98
AFI71017	AFI ASW-17 RC SAILPLANE	79.95	60.50	98
AFI71020	AFI SUPER MONTEREY 100 IN	44.95	32.60	98
AFI71025	AFI SUPER MALIBU 72 IN	29.95	22.50	98
AFI71030	AFI CALIFORNIAN SAILPLANE	69.95	52.50	98
AFI72000	AFI VELIE MONOCOUPE	34.95	27.95	20
AFI72100	AFI GEE BEE MODEL D SPORTSTER	34.95	27.95	20
AFM74000	AIR-FORMS F-86 DUCTED FAN JET	134.95	114.95	16
AIR20001	AIRTRONICS 9504 LCH. FAIL STD.	36.95	29.55	232
AIR20002	AIRTRONICS 9505 LCH. FAIL H.D.	38.95	31.15	232
AIR20502	AIRTRONICS 9502 P-POD QUESTOR	7.95	7.15	232
AIR20506	AIRTRONICS 9506 DELUXE CHUTE	13.95	11.85	232
AIR20507	AIRTRONICS 9507 REGULAR HOOK	.75	.70	232
AIR20508	AIRTRONICS 9508 SUPER HOOK	1.25	1.20	232
AIR20511	AIRTRONICS 9511 ADJUSTBLE HOOK	2.50	2.40	232
AIR20514	AIRTRONICS 9514 DELUXE SKID	1.95	1.85	232
AIR20520	AIRTRONICS 9520 VECTOR DIRECTR	3.95	3.60	158
AIR20522	AIRTRONICS 9522 P-POD SQ SOAR	2.95	2.75	232
AIR20524	AIRTRONICS 9524 STD TUBING	18.50	15.75	232
AIR20525	AIRTRONICS 9525 HEAVY TUBING	20.50	17.45	232
AIR20526	AIRTRONICS 9526 STD CHUTE	7.95	7.15	232
AIR20527	AIRTRONICS 9527 P-POD OLYMP II	9.95	8.95	232
AIR71101	AIRTRONICS 101 SQUARE SOAR	24.95	20.50	97
AIR71102	AIRTRONICS 102 Q-TEE 1/2 A	21.95	17.95	17
AIR71103	AIRTRONICS 103 GERE SPORT	39.95	31.95	17
AIR71104	AIRTRONICS 104 S-TEE	21.95	17.95	17
AIR71203	AIRTRONICS 203 QUESTOR GLIDER	34.95	27.95	97
AIR71205	AIRTRONICS 205 SUPER QUESTOR	39.95	32.95	97
AIR71206	AIRTRONICS 206 AQUILA	69.95	52.45	96
AIR71208	AIRTRONICS 208 OLYMPIC II	49.95	38.75	96
AIR71209	AIRTRONICS 209 CADET 62 IN.	36.95	29.55	96
AIR72302	AIRTRONICS 302 NEW ERA III	49.95	38.75	17
AIR74301	AIRTRONICS 301 ACRO-STAR BIPE	89.95	67.45	17
AJJ33100	A-JUSTO-JIG STANDARD WING JIG	49.95	37.50	189
AJJ33101	A-JUSTO-JIG WING & FUSE JIG	59.95	44.95	189
AJJ33202	A-JUSTO-JIG FUSE-JIG KIT	10.00	8.00	189
AMB31104	AMBROID REG. CEMENT 4 OZ.	1.25	1.20	177
AND72001	ANDREWS ARC-1 S-RAY	34.95	26.25	19
AND72002	ANDREWS ARC-2 H-RAY	39.95	29.95	19
AND72007	ANDREWS ARC-7 MINIMASTER	44.95	33.75	18
AND73005	ANDREWS ARC-5 TRAINERMASTER	52.95	39.70	18
AND73006	ANDREWS ARC-6 A-RAY	44.95	33.75	18
AND73008	ANDREWS ARC-8 BIG-H RAY	49.95	37.50	19
AND73009	ANDREWS ARC-9 QUICKRAY-500	49.95	37.50	19
AND74003	ANDREWS ARC-3 AEROMASTER TOO	74.95	56.25	18
AND74004	ANDREWS ARC-4 SPORTMASTER	69.95	52.50	18
ARC16000	SUPERR-QUIET MUFFLER-K&B .40	17.95	17.00	127
ARC16001	SUPERR-QUIET MUFFLER-HB .40	17.95	17.00	127
ARC77000	AMERICAN REV-OLUTION W/O ENGIN	239.00	227.00	126
ARC77010	AMERICAN REV-OLUTION W/ HB 40	294.00	279.00	126
ARC77040	REVOLUTION W/COLLECTIVE PITCH	289.95	275.45	126
ARC77200	AMERICAN REVOLUTION II W/O ENG	299.95	284.95	126
ARC77210	AMERICAN REVOLUTION II W/HB 61	379.95	360.95	126
ARC77260	REVOLUTION II W/COLLECT PITCH	349.95	332.45	126
ARC77300	AMERICAN RC JET RANGER W/O ENG	349.00	331.55	127
ARC77310	AMERICAN RC JET RANGER W/HB 61	419.00	398.00	127
ARC77360	JET RANGER W/COLLECTIVE PITCH	399.00	379.00	127
ARC78100	REVOLUTION FLOAT KIT	22.95	21.80	127
ARC78200	REVOLUTION MAIN ROTOR BLADES	7.75	7.35	127
ARC78300	COLLECTIVE PITCH - 40 SIZE	89.95	85.45	126
ARC78360	COLLECTIVE PITCH - 60 SIZE	179.95	169.95	126
ARC78400	AMERICAN COPTER TRAINING GEAR	34.95	33.20	126
ASC94100	ASSOCIATED RC100 CAR KIT	125.00	99.95	118
ASC94200	ASSOCIATED RC200 CAR KIT	195.00	145.95	118
ASC95011	LEXAN 1/8 CAR BODY-PORCHE 30KL	19.95	16.95	118
ASC95021	LEXAN 1/8 CAR BODY-CORVETTE	19.95	16.95	118
B&D22300	B&D PNEUMATIC RETRACTS-3 GEAR	89.95	71.95	250
BAD62001	BADGER #200-1 AIR-BRUSH KIT	29.95	23.95	240
BAD62003	BADGER #200-3 DELUXE KIT	39.95	31.95	240
BAD62100	BADGER CAN OF PROPEL 11 OZ.	2.80	2.65	240
BAD62150	BADGER #150-IL POSTER AIRBRUSH	59.95	47.95	240
BAD62200	BADGER #180-1 COMPRESSOR	85.00	67.95	240
BAD62351	BADGER #350-1 AIR-BRUSH KIT	19.95	16.95	240
BAD62353	BADGER #350-3 DELUXE KIT	29.95	23.95	240
BAD62501	BADGER #250-1 STANDARD KIT	9.95	8.95	240
BAD62504	BADGER #250-4 MINI SPRAY KIT	12.50	10.95	240
BAD62811	BADGER #50-011 10 FT. AIR HOSE	4.50	4.25	240
BAD62823	BADGER #50-023 PIPE THREAD FIL	1.50	1.40	240
BAN26180	BANNER AXLE SHAFTS 1/8 IN (2)	1.40	1.35	261
BAN26332	BANNER AXLE SHAFTS 3/32 IN (2)	1.30	1.25	261
BAN26532	BANNER AXLE SHAFTS 5/32 IN (2)	1.50	1.45	261
BAU72000	BAUER HARDWOODY	26.95	23.95	21
BOL90094	BOLINK 6-CELL ELECTRIC CAR	99.95	85.95	120
BOL90194	BOLINK 6-CELL CAR & FUTABA 2F	239.95	199.95	120
BRI14005	BRIDI ENGINE MOUNT 05	2.19	2.10	218
BRI14009	BRIDI ENGINE MOUNT 09	2.39	2.30	218
BRI14015	BRIDI ENGINE MOUNT 15	2.49	2.40	218
BRI14019	BRIDI ENGINE MOUNT 19	2.79	2.60	218
BRI14040	BRIDI ENGINE MOUNT 40	2.89	2.70	218
BRI14060	BRIDI ENGINE MOUNT 60	3.28	3.10	218
BRI14061	BRIDI ENGINE MOUNT 60L	3.49	3.30	218
BRI26001	B&E L-1 LANDING GEAR SMALL 9IN	2.75	2.60	158
BRI26002	B&E L-2 LANDING GEAR MED. 11IN	2.95	2.75	158
BRI26003	B&E L-3 LANDING GEAR LGE. 12IN	3.25	3.00	158
BRI26004	B&E L-4 LANDING GEAR X-LG 14IN	3.55	3.30	158
BRI26007	B&E L-7 TAILWHEEL ASSEMBLY	.99	.95	261
BRI26010	B&E L-5 LANDING GEAR ASSEMBLY	2.25	2.10	261
BRI33333	BRIDI WING JIG	15.95	13.55	190
BRI42310	B&E MASKING QSI-MSK 1/16 IN	1.00	.95	258
BRI42311	B&E STRIPE QS1-RED 1/16 IN.	1.98	1.90	258
BRI42312	B&E STRIPE QS1-ORANGE 1/16 IN.	1.98	1.90	258
BRI42313	B&E STRIPE QS1-YELLOW 1/16 IN.	1.98	1.90	258
BRI42314	B&E STRIPE QS1-WHITE 1/16 IN.	1.98	1.90	258
BRI42315	B&E STRIPE QS1-SILVER 1/16 IN.	1.98	1.90	258
BRI42316	B&E STRIPE QS1-BLUE 1/16 IN.	1.98	1.90	258
BRI42318	B&E STRIPE QS1-GOLD 1/16 IN.	1.98	1.90	258
BRI42319	B&E STRIPE QS1-BLACK 1/16 IN.	1.98	1.90	258
BRI42320	B&E MASKING QSI-MSK 3/32 IN	1.19	1.10	258
BRI42321	B&E STRIPE QS1-RED 3/32 IN.	2.69	2.55	258
BRI42322	B&E STRIPE QS1-ORANGE 3/32 IN.	2.69	2.55	258
BRI42323	B&E STRIPE QSI-YELLOW 3/32 IN	2.69	2.55	258
BRI42324	B&E STRIPE QSI-WHITE 3/32 IN	2.69	2.55	258
BRI42325	B&E STRIPE QSI-SILVER 3/32 IN	2.69	2.55	258
BRI42326	B&E STRIPE QS1-BLUE 3/32 IN.	2.69	2.55	258
BRI42328	B&E STRIPE QSI-GOLD 3/32 IN	2.69	2.55	258
BRI42329	B&E STRIPE QSI-BLACK 3/32 IN	2.69	2.55	258
BRI42330	B&E MASKING QSI-MSK 1/8 IN	1.39	1.30	258
BRI42331	B&E STRIPE QS1-RED 1/8 IN.	2.69	2.55	258
BRI42332	B&E STRIPE QSI-ORANGE 1/8 IN	2.69	2.55	258
BRI42333	B&E STRIPE QSI-YELLOW 1/8 IN	2.69	2.55	258
BRI42334	B&E STRIPE QSI-WHITE 1/8 IN	2.69	2.55	258
BRI42335	B&E STRIPE QSI-SILVER 1/8 IN	2.69	2.55	258
BRI42336	B&E STRIPE QSI-BLUE 1/8 IN	2.69	2.55	258
BRI42338	B&E STRIPE QSI-GOLD 1/8 IN	2.69	2.55	258
BRI42339	B&E STRIPE QSI-BLACK 1/8 IN	2.69	2.55	258
BRI42340	B&E MASKING QSI-MSK 1/4 IN	1.59	1.50	258
BRI42341	B&E STRIPE QS1-RED 1/4 IN.	3.69	3.50	258
BRI42342	B&E STRIPE QSI-ORANGE 1/4 IN	3.69	3.50	258
BRI42343	B&E STRIPE QSI-YELLOW 1/4 IN	3.69	3.50	258
BRI42344	B&E STRIPE QSI-WHITE 1/4 IN	3.69	3.50	258
BRI42345	B&E STRIPE QSI-SILVER 1/4 IN	3.69	3.50	258
BRI42346	B&E STRIPE QSI-BLUE 1/4 IN	3.69	3.50	258
BRI42348	B&E STRIPE QSI-GOLD 1/4 IN	3.69	3.50	258
BRI42349	B&E STRIPE QSI-BLACK 1/4 IN	3.69	3.50	258

PRICE LISTING SECTION

STOCK NO	DESCRIPTION	RETAIL PRICE	TOWER PRICE	PAGE #
BRI42350	B&E MASKING QSI-MSK 3/8 IN	1.79	1.70	258
BRI42360	B&E MASKING QSI-MSK 1/2 IN	1.99	1.90	258
BRI70100	BRIDI CHUBASCO DV40-60 (GLASS)	84.95	63.70	107
BRI71100	BRIDI SOAR BIRDY GLIDER	19.95	15.95	267
BRI72000	BRIDI QUICKEST 200	24.95	18.70	25
BRI72001	BRIDI RCM BASIC TRAINER	39.95	29.95	25
BRI72002	BRIDI RCM TRAINER 20	34.95	26.20	24
BRI72005	BRIDI SPORTSTER	39.95	29.95	25
BRI72007	BRIDI RCM TRAINER 10	27.95	20.95	24
BRI72008	BRIDI SUN FLI 4-20	29.95	22.50	25
BRI73005	BRIDI CLASSIC 40	54.95	39.95	25
BRI73006	BRIDI SUPER KAOS 40	55.95	41.95	22
BRI73007	BRIDI RCM TRAINER 40	54.95	39.95	24
BRI73009	BRIDI TWEEDY BIRD	39.95	29.95	25
BRI73010	BRIDI DIRTY BIRDY 40 WOOD	59.95	44.95	22
BRI73015	BRIDI QUICKEST 500	42.95	32.20	25
BRI73500	BRIDI 15-500	39.95	29.95	25
BRI74002	BRIDI RCM TRAINER 60	62.95	47.20	24
BRI74003	BRIDI KAOS 60	66.95	50.20	22
BRI74004	BRIDI SUPER KAOS 60	69.95	51.95	22
BRI74005	BRIDI AERO COMMANDER SHRIKE	184.95	133.25	28
BRI74006	BRIDI DIRTY BIRDY 60 (GLASS)	124.95	93.70	23
BRI74007	BRIDI DIRTY BIRDY 60 (WOOD)	84.95	63.75	23
BRI74008	BRIDI P-51 FIBERGLASS	134.95	101.20	26
BRI74009	BRIDI BROWN B-2 (FIBERGLASS)	134.95	101.20	26
BRI74010	BRIDI AT-6 TEXAN (FIBERGLASS)	134.95	101.20	27
BRI74011	BRIDI UFO (FIBERGLASS)	129.95	97.50	23
BRI74012	BRIDI SUPER CHIPMUNK (GLASS)	124.95	93.70	26
BRI74013	BRIDI LOCKHEED SIRUS (GLASS)	134.95	101.20	26
BRI74014	BRIDI WACO METEOR (GLASS)	99.95	74.95	28
BRI74015	BRIDI F-7 TIGERCAT (GLASS)	198.95	149.20	28
BRI74016	BRIDI KRAFT SUPER FLI (BALSA)	92.95	69.70	27
BRI74017	BRIDI T-28 (GLASS)	134.95	101.20	27
BRI74018	BRIDI SPITFIRE (GLASS)	134.95	101.20	27
BRI74100	BRIDI COSMIC WIND 1/4 SCL-GLAS	139.95	104.95	29
BRI74110	BRIDI CORBIN ACE-1/4 SCALE	129.95	97.50	29
CBA14049	C B MOUNT 1/2A-SHORT #5401	2.45	2.30	218
CBA14050	C B MOUNT 1/2A-LONG #5402	2.55	2.40	218
CBA14150	CB ASSOCIATES MOUNT .15 #5301	4.65	4.20	218
CBA14151	CB ASSOCIATES MOUNT .15R #5302	4.85	4.40	218
CBA14200	CB ASSOCIATES MOUNT .20 #5303	4.75	4.30	218
CBA14300	CB ASSOCIATES MOUNT .30 #5304	4.85	4.40	218
CBA14400	CB ASSOCIATES MOUNT .40 #5305	4.95	4.50	218
CBA14401	CB ASSOCIATES MOUNT .40R #5306	5.95	5.35	218
CBA14600	CB ASSOCIATES MOUNT .60 #5307	5.95	5.35	218
CBA14601	CB ASSOCIATES MOUNT .60R #5308	6.25	5.75	218
CBA14800	CB ASSOCIATES MOUNT .80 #5309	6.25	5.75	218
CBA18005	C B SPINNER ALUM 2 #5505	4.95	4.50	256
CBA18006	C B SPINNER ALUM 2 1/4 #5506	5.50	5.00	256
CBA18007	C B SPINNER ALUM 2 1/2 #5507	5.95	5.50	256
CBA18111	C B SPINNER 1-3/4 RED #5001	2.95	2.65	256
CBA18112	C B SPINNER 1-3/4 BLACK #5003	2.95	2.65	256
CBA18113	C B SPINNER 1-3/4 WHITE #5005	2.95	2.65	256
CBA18121	C B SPINNER 2 IN. RED #5013	3.25	2.95	256
CBA18122	C B SPINNER 2 IN. BLACK #5015	3.25	2.95	256
CBA18123	C B SPINNER 2 IN. WHITE #5017	3.25	2.95	256
CBA18131	C B SPINNER 2-1/4 RED #5025	3.75	3.40	256
CBA18132	C B SPINNER 2-1/4 BLACK #5027	3.75	3.40	256
CBA18133	C B SPINNER 2-1/4 WHITE #5029	3.75	3.40	256
CBA18141	C B SPINNER 2-1/2 RED #5037	3.95	3.60	256
CBA18142	C B SPINNER 2-1/2 BLACK #5039	3.95	3.60	256
CBA18143	C B SPINNER 2-1/2 WHITE #5041	3.95	3.60	256
CBA18151	C B SPINNER 2-3/4 RED #5049	4.75	4.30	256
CBA18152	C B SPINNER 2-3/4 BLACK #5051	4.75	4.30	256
CBA18153	C B SPINNER 2-3/4 WHITE #5053	4.75	4.30	256
CBA18161	C B SPINNER 3 IN. RED #5061	4.95	4.50	256
CBA18162	C B SPINNER 3 IN. BLACK #5063	4.95	4.50	256
CBA18163	C B SPINNER 3 IN. WHITE #5065	4.95	4.50	256
CBA18181	C B SPINNER 3.5 P-40 RED #5085	6.25	5.75	256
CBA18182	C B SPINNER 3.5 P-40 BLK #5087	6.25	5.75	256
CBA18183	C B SPINNER 3.5 P-40 WHI #5089	6.25	5.75	256
CBA18191	C B SPINNER 3.5 P-51 RED #5073	6.25	5.75	256
CBA18192	C B SPINNER 3.5 P-51 BLK #5075	6.25	5.75	256
CBA18193	C B SPINNER 3.5 P-51 WHI #5077	6.25	5.75	256
CBA18211	C B ADAP LG #5201 1/4-28 0 N	.55	.50	256
CBA18212	C B ADAP LG #5202 7 MM 1 N	.55	.50	256
CBA18213	C B ADAP LG #5203 6 MM 2 N	.55	.50	256
CBA18214	C B ADAP LG #5204 5/16-24 3 N	.55	.50	256
CBA18221	C B ADAP SM #5220 1/4-28 0 N	.50	.45	256
CBA18223	C B ADAP SM #5222 6 MM 2 N	.50	.45	256
CBA18226	C B ADAP SM #5223 10-32 3 N	.50	.45	256
CBA18227	C B ADAP SM #5224 5 MM 4 N	.50	.45	256
CBA26000	C B TAILWHEEL ASSEMBLY #5510	7.95	6.95	261
CMP39000	CUSTOM MODEL PRODUCTS Z-PLIERS	9.95	9.95	190
CON72000	CONCEPT AIRSCOUT	39.95	31.95	31
CON73000	CONCEPT BARNSTORMER BIPE	69.95	55.95	31
CON73100	CONCEPT SUPER FLI	69.95	55.95	31
CON73200	CONCEPT TRAVELAIRE	69.95	55.95	31
COV41201	COVERITE SUPER 38X47 WHITE	7.75	6.75	205
COV41202	COVERITE SUPER 38X47 RED	7.75	6.75	205
COV41203	COVERITE SUPER 38X47 BLUE	7.75	6.75	205
COV41204	COVERITE SUPER 38X47 ORANGE	7.75	6.75	205
COV41205	COVERITE SUPER 38X47 YELLOW	7.75	6.75	205
COV41206	COVERITE SUPER 38X47 ANTIQUE	7.75	6.75	205
COV41251	COVERITE SUPER 47X15 FT WHITE	36.50	27.40	205
COV41252	COVERITE SUPER 47X15 FT RED	36.50	27.40	205
COV41253	COVERITE SUPER 47X15 FT BLUE	36.50	27.40	205
COV41254	COVERITE SUPER 47X15 FT ORANGE	36.50	27.40	205
COV41255	COVERITE SUPER 47X15 FT YELLOW	36.50	27.40	205
COV41256	COVERITE SUPER 47X15 FT ANTIQU	36.50	27.40	205
COV41301	COVERITE SILKSPUN 38X54 WHITE	7.75	6.75	205
COV41302	COVERITE SILKSPUN 38X54 RED	7.75	6.75	205
COV41303	COVERITE SILKSPUN 38X54 BLUE	7.75	6.75	205
COV41304	COVERITE SILKSPUN 38X54 ORANGE	7.75	6.75	205
COV41305	COVERITE SILKSPUN 38X54 YELLOW	7.75	6.75	205
COV41351	COVERITE SILKSPUN 38X25FT WHIT	43.00	32.25	205
COV41401	COVERITE CAMOUFLAGE 1-1/2 SCL	9.95	7.95	205
COV41402	COVERITE CAMOUFLAGE 2 IN. SCL	9.95	7.95	205
COV41501	COVERITE PERMAGLOS 38X43 WHITE	9.75	8.25	205
COV41502	COVERITE PERMAGLOS 38X43 RED	9.75	8.25	205
COV41503	COVERITE PERMAGLOS 38X43 BLUE	9.75	8.25	205
COV41504	COVERITE PERMAGLOS 38X43 ORANG	9.75	8.25	205
COV41505	COVERITE PERMAGLOS 38X43 YELLO	9.75	8.25	205
COV41506	COVERITE PERMAGLOS 38X43 O.D.	9.75	8.25	205
COV41507	COVERITE PERMAGLOS 38X43 ALUM.	10.70	8.95	205
COV41508	COVERITE PERMAGLOS 38X43 BLACK	9.75	8.25	205
COV41551	COVERITE PERM. 46X15 FT WHITE	46.18	34.65	205
COV41552	COVERITE PERM. 46X15 FT RED	46.18	34.65	205
COV41553	COVERITE PERM. 46X15 FT BLUE	46.18	34.65	205
COV41554	COVERITE PERM. 46X15 FT ORANGE	46.18	34.65	205
COV41555	COVERITE PERM. 46X15 FT YELLOW	46.18	34.65	205
COV41556	COVERITE PERM. 46X15 FT O.DRAB	46.18	34.65	205
COV41557	COVERITE PERM. 46X15 FT ALUM.	50.68	37.95	205
COV41604	COVERITE DAYGLOW ORANGE 38X43	10.70	8.95	205
COV41605	COVERITE DAYGLOW YELLOW 38X43	10.70	8.95	205
COV45000	COVERITE TRIM-IT KNIFE	1.19	.95	190
COV60000	COVERITE BALSARITE 8 OZ	2.95	2.85	241
COV61008	COVERITE GLASKOTE 1/2 PT.	2.95	2.80	241
COV61016	COVERITE GLASKOTE THINNER 1 PT	2.55	2.15	241
COX00049	COX 450-1 QRC .049 W/MUFF+TANK	14.95	10.90	146
COX01010	COX 130 TEE DEE .01 W/TANK	20.95	15.75	146
COX01020	COX 160 TEE DEE .02 W/TANK	20.95	15.70	146
COX01049	COX 170 TEE DEE .049 ENGINE	20.95	15.70	146
COX01051	COX 200 TEE DEE .051 ENGINE	20.95	15.70	146
COX01090	COX 210 TEE DEE .09 ENGINE	24.95	18.70	146
COX02049	COX 240 MEDALLION .049 ENGINE	16.95	12.75	146
COX02090	COX 230 MEDALLION .09 ENGINE	20.95	15.75	146
COX02150	COX 220 MEDALLION .15 ENGINE	26.95	20.25	146
COX02505	COX 240-1 MEDALLION .049 RC	18.95	14.25	146
COX02509	COX 230-1 MEDALLION .09 RC	22.95	17.25	146
COX02515	COX 220-1 MEDALLION .15 RC	28.95	21.75	146
COX03020	COX 100 PEE WEE .020 W/TANK	11.95	9.50	146
COX03025	COX 100-1 PEE WEE .020 RC W/TK	13.95	10.35	146
COX03049	COX 120 GOLDEN BEE .049 W/TANK	12.95	10.00	146
COX03050	COX 120-1 GOLD BEE .049 RC W/T	14.95	11.20	146
COX03051	COX 150 BLACK WIDOW .049 W/TNK	13.95	10.45	146
COX04049	COX 350 BABE BEE .049 W/TANK	10.95	7.95	146
COX05150	COX 2810 CONQUEST .15 RC	59.95	44.95	146
COX10330	COX 330 STARTING KIT FOR .049	5.25	4.65	214
COX10880	COX 880 AIRPLANE STARTING KIT	5.65	4.95	214
COX14440	COX 2440 TANK MT-TD & MED .049	4.35	4.15	219
COX15015	COX 2890 EXTRACTOR CONQUEST 15	4.95	4.60	222
COX16002	COX 2620 MUFFLER FOR .020	3.10	2.95	222
COX16004	COX 2630 MUFFLER FOR .049	4.05	3.85	222
COX16009	COX 2640 MUFFLER FOR .09	3.75	3.55	222
COX16015	COX 2650 MUFFLER FOR .15	3.75	3.55	222
COX16115	COX 2861 MUFFLER-CONQUEST .15	7.95	7.15	222
COX17002	COX 1032 GLOWHEAD ALL .020	1.50	1.45	214
COX17004	COX 302-1 GLOWHEAD REED .049	1.50	1.45	214
COX17101	COX 1302 GLOWHEAD TEE DEE .010	2.35	2.25	214
COX17104	COX 1702 GLOWHEAD TD 49/51/QRC	1.95	1.85	214
COX17109	COX 2102 GLOWHEAD TEE DEE .09	2.95	2.80	214
COX17209	COX 2302 GLOWHEAD MEDALLION.09	2.85	2.70	214
COX17215	COX 1102 GLOWHEAD MEDALLION.15	2.85	2.70	214
COX17241	COX 241 NYLON PROP 4-1/2X2	.75	.70	247
COX17242	COX 242 NYLON PROP 5X3	.75	.70	247
COX17243	COX 243 NYLON PROP 5-1/2X4	.75	.70	247
COX17244	COX 244 NYLON PROP 6X3	.75	.70	247
COX17245	COX 245 NYLON PROP 6X4	.75	.70	247
COX17247	COX 247 NYLON PROP 3X1-1/4	.75	.70	247
COX70601	COX 900601 TRADEWINDS SAILBOAT	129.95	103.95	107
COX72401	COX 401 CESSNA CENTURION RTF	54.95	43.95	30
COX72402	COX 402 SPORTAVIA RTF TRAINER	69.95	53.95	30
COX90501	COX LAMB. COUNTACH & 2CH RADIO	129.95	109.95	119
COX90502	COX FERRARI 512BB ELECTRIC CAR	99.95	84.95	119
COX93551	COX 900551 NICAD BATTERY PACK	29.95	25.45	119
COX93552	COX 900552 NICAD QUICK CHARGER	19.95	16.95	119
COX93553	COX 900553 NIC BATTERY CHARGER	9.95	8.95	119
CRA20001	CRAFT AIR PP-1 PARACHUTE	5.95	5.50	231
CRA20003	CRAFT AIR PP-3 PARA-POD	9.95	8.75	231
CRA20010	CRAFT AIR HS-1 STD HI-START	34.95	27.95	231
CRA20020	CRAFT AIR HS-2 HVY HI-START	39.95	31.95	231
CRA20030	CRAFT-AIR HS-3 REGULAR TUBING	19.95	15.95	231
CRA20040	CRAFT-AIR HS-4 HEAVY TUBING	23.95	19.15	231
CRA20050	CRAFT-AIR HS-5 SUPER HI-START	53.95	35.95	231
CRA20060	CRAFT-AIR HS-6 SUPER TUBING	32.50	25.95	231
CRA20325	CRAFT-AIR SP-325 SPOILER	3.95	3.80	231
CRA71001	CRAFT AIR SP-1 DRIFTER	24.95	18.95	100
CRA71003	CRAFT AIR SP-3 WINDRIFTER	47.95	35.95	100
CRA71004	CRAFT AIR SP-4 SD 100	59.95	45.95	101
CRA71005	CRAFT AIR SP-5 SAILAIR	129.95	93.95	101
CRA71006	CRAFT-AIR SP-6 J-BIRD GLIDER	59.95	45.95	100

STOCK NO	DESCRIPTION	RETAIL PRICE	TOWER PRICE	PAGE #
CRA71071	CRAFT-AIR SP-7 VIKING MK I	79.95	59.95	101
CRA71072	CRAFT-AIR SP-7 VIKING MK II	79.95	59.95	101
CRA72001	CRAFT-AIR PK-1 BUHL BULL PUP	34.95	27.95	32
CRA72002	CRAFT-AIR PK-2 BUTTERFLY II	49.95	37.50	32
CRA90001	CRAFT AIR VM-2 VOLTMETER	24.95	18.70	209
CRA90100	CRAFT-AIR FB-1 FIELD BOX	29.95	23.95	234
D&R14001	D&R POWER POD	4.95	4.45	233
DAE19000	DAE HAND-I-START 1.5 V BATTERY	7.95	6.60	185
DAE20000	DAE HANDI-START CHARGER #7609	9.95	8.95	185
DAE90000	DAE SERIES IV POWER PANEL	34.95	26.95	210
DAE90001	DAE 7800 PUMP SWITCH-SERIES IV	37.95	28.95	267
DAE90411	DAE SINGLE RANGE(4 OR 12 VOLT)	19.95	15.95	210
DAE90412	DAE DUAL RANGE (4 OR 12 VOLT)	24.95	21.25	210
DAE90413	DAE 7805 PUMP SWTCH-DUAL RANGE	27.95	22.35	267
DAE90500	DAE GLO-START PANEL	18.95	15.15	210
DEV32206	DEVCON R-206 LARGE 2.5 OZ.	2.65	2.25	178
DEV32207	DEVCON R-207 GIANT 16 OZ.	9.50	7.95	178
DEV32208	DEVCON R-208 DEV-TUBE 1 OZ.	1.95	1.65	178
DEV32209	DEVCON M-209 9 OZ. 5 MINUTE	5.80	3.95	178
DEV32233	DEVCON M-33 9 OZ. 30 MINUTE	5.80	4.75	178
DEV32250	DEVCON R-250 SILICON RUBR 3 OZ	2.75	2.35	178
DOD71000	DODGSON DESIGN TODI GLIDER	94.95	85.45	99
DOD71003	DODGSON DESIGN MAESTRO MK III	109.95	98.95	99
DOD71004	DODGSON DESIGN HIJACKER II	79.95	71.95	99
DRE34210	DREMEL #210 DRILL PRESS	21.95	18.95	197
DRE34217	DREMEL #217 FOOT SPEED CONTROL	23.95	19.95	197
DRE34219	DREMEL #219 SPEED CONTROL	21.95	18.95	197
DRE34223	DREMEL #2217 MOTO-TOOL HOLDER	14.95	12.95	197
DRE34229	DREMEL #229 ROUTER ATTACHMENT	10.95	9.95	197
DRE34232	DREMEL #232 MOTO FLEX	69.95	52.50	191
DRE34245	DREMEL #245 MOTO TOOL	39.95	31.95	196
DRE34270	DREMEL #270 MOTO TOOL	39.95	31.95	196
DRE34271	DREMEL #271 MOTO TOOL KIT	49.95	39.95	196
DRE34280	DREMEL #280 MOTO TOOL	44.95	35.95	195
DRE34281	DREMEL #281 MOTO TOOL KIT	59.95	46.95	195
DRE34371	DREMEL #371 MOTO TOOL KIT	59.95	46.95	195
DRE34380	DREMEL #380 MOTO TOOL	54.95	42.95	194
DRE34381	DREMEL #381 MOTO TOOL KIT	69.95	52.50	194
DRE34550	DREMEL #550 MOTO-SAW	49.95	39.95	191
DRE34571	DREMEL #571 MOTO-SHOP	69.95	52.50	193
DRE34572	DREMEL #572 DELUXE MOTO-SHOP	89.95	67.50	193
DRE34580	DREMEL #580 TABLE SAW	89.95	67.50	191
DRE34701	DREMEL #701 DELUXE MOTO-LATHE	59.95	46.95	191
DRE34914	DREMEL #2214 D-VISE	21.95	18.95	196
DRE35059	DREMEL #90196 FLEXIBLE SHAFT	13.80	11.95	196
DRE35060	DREMEL #8029 SAW BLADES-FINE	1.10	1.05	196
DRE35061	DREMEL #8030 SAW BLADES-COARSE	1.20	1.15	196
DRE35115	DREMEL #115 STEEL CUTTER	2.50	2.40	196
DRE35193	DREMEL #193 STEEL CUTTER	2.50	2.40	196
DRE35194	DREMEL #194 STEEL CUTTER	2.50	2.40	196
DRE35196	DREMEL #196 STEEL CUTTER	2.50	2.40	196
DRE35402	DREMEL #402 MANDREL	1.10	1.05	196
DRE35408	DREMEL #408 DRUM SANDER BANDS	1.10	1.05	196
DRE35409	DREMEL #409 CUTTING WHEEL	2.60	2.55	196
DRE35411	DREMEL #411 SANDING DISKS	1.35	1.30	196
DRE35432	DREMEL #432 DRUM SANDER BANDS	1.10	1.05	196
DRE35573	DREMEL #573 ACCESSORY PACKAGE	24.95	21.25	193
DUB16143	DUBRO 143 MUFF-L-AIR .29-.60	7.95	6.95	223
DUB16144	DUBRO 144 MUFF-L-AIR .09-.25	5.95	5.45	223
DUB20101	DUBRO 101 STRIP AILERON ASMBLY	2.95	2.65	159
DUB20102	DUBRO 102 CONTROL ROD ASSEMBLY	1.49	1.40	160
DUB20103	DUBRO 103 STRIP AIL HORN CON-2	.79	.75	159
DUB20104	DUBRO 104 STRIP AIL BEARINGS-2	.89	.85	159
DUB20105	DUBRO 105 LG CONTROL HORNS L&R	.49	.47	160
DUB20106	DUBRO 106 KWIK LINK 4 IN.	.49	.47	159
DUB20107	DUBRO 107 1/2A CONTROL HORNS	.49	.47	266
DUB20108	DUBRO 108 KWIK LINK 12 IN.	.49	.47	159
DUB20109	DUBRO 109 KWIK LINK CLEVIS (2)	.75	.70	159
DUB20110	DUBRO 110 COUPLING SLEEVES (4)	.30	.29	160
DUB20111	DUBRO 111 THREADED COUPLERS(2)	.40	.37	160
DUB20112	DUBRO 112 SOLDER LINKS (2)	.69	.65	159
DUB20113	DUBRO 113 MINI PUSHROD ASSMBLY	1.49	1.40	266
DUB20114	DUBRO 114 SM SERVO MTG. HDWE-5	1.20	1.15	160
DUB20115	DUBRO 115 SM RUBBER GROMETS-20	.80	.75	160
DUB20116	DUBRO 116 LARGE NYLON HINGE-6	1.10	1.05	161
DUB20117	DUBRO 117 LARGE NYLON HINGE-15	2.49	2.10	161
DUB20118	DUBRO 118 SMALL NYLON HINGE-6	1.00	.95	161
DUB20119	DUBRO 119 SMALL NYLON HINGE-15	1.95	1.85	161
DUB20120	DUBRO 120 OVERRIDE SERVO SAVER	.98	.95	160
DUB20121	DUBRO 121 E-Z CONNECTORS (2)	.98	.95	160
DUB20122	DUBRO 122 NYLON KWIK LINK (2)	.39	.37	159
DUB20123	DUBRO 123 NYLON LINK W/ROD	.29	.27	159
DUB20124	DUBRO 124 NYLON BEARING 3/32-4	.75	.70	159
DUB20125	DUBRO 125 MTG BOLT/NUTS 256(4)	.50	.47	162
DUB20126	DUBRO 126 MTG BOLT/NUTS 348(4)	.50	.47	162
DUB20127	DUBRO 127 MTG BOLT/NUTS 440(4)	.55	.52	162
DUB20128	DUBRO 128 MTG BOLT/NUTS 632(4)	.55	.52	162
DUB20129	DUBRO 129 SKT BOLT&BN 440X1 -4	1.10	1.05	162
DUB20130	DUBRO 130 SKT BOLT&BN 632X1 -4	1.10	1.05	162
DUB20131	DUBRO 131 SOCKET WRENCHES (2)	1.10	1.05	162
DUB20132	DUBRO 132 BALL WRENCH SET (2)	4.25	3.80	162
DUB20133	DUBRO 133 BLIND NUTS 256 (4)	.35	.33	162
DUB20134	DUBRO 134 BLIND NUTS 348 (4)	.35	.33	162
DUB20135	DUBRO 135 BLIND NUTS 440 (4)	.35	.33	162
DUB20136	DUBRO 136 BLIND NUTS 632 (4)	.40	.37	162
DUB20137	DUBRO 137 DURA COLLARS 1/16(4)	.80	.75	161
DUB20138	DUBRO 138 DURA COLLARS 3/32(4)	.80	.75	161
DUB20139	DUBRO 139 DURA COLLARS 1/8 (4)	.80	.75	161
DUB20140	DUBRO 140 DURA COLLARS 5/32(4)	.80	.75	161
DUB20141	DUBRO 141 DURA COLLARS 3/16(4)	.80	.75	161
DUB20146	DUBRO 146 MUFFLER STRAP	1.50	1.40	223
DUB20147	DUBRO 147 KWIK GLOW PLUG CORD	2.25	2.00	162
DUB20148	DUBRO 148 1/2 A KWIK KLIP	.75	.70	162
DUB20149	DUBRO 149 1/2 A KLIP W/CORD	1.25	1.20	162
DUB20150	DUBRO 150 KWIK KLIP	.85	.80	162
DUB20151	DUBRO 151 KWIK KLIP W/CORD	1.40	1.30	162
DUB20152	DUBRO 152 NOSE GEAR, BENT	2.95	2.65	161
DUB20153	DUBRO 153 NOSE GEAR, STRAIGHT	2.95	2.65	161
DUB20154	DUBRO 154 NOSE GEAR WIRE 5/32	.75	.70	161
DUB20155	DUBRO 155 STEERING ARM ASSMBLY	1.25	1.20	161
DUB20156	DUBRO 156 NOSE GEAR BLOCKS (2)	1.25	1.20	161
DUB20157	DUBRO 157 FRICTION BRAKE- NOSE	2.95	2.65	161
DUB20158	DUBRO 158 LANDING GR STRAPS(4)	.40	.37	161
DUB20159	DUBRO 159 NYLON WING BOLT SET	1.25	1.20	161
DUB20160	DUBRO 160 PROP BALANCER	2.95	2.65	161
DUB20161	DUBRO 161 R/C TANK FILTER	1.15	1.10	227
DUB20162	DUBRO 162 FINAL FILTER	1.75	1.65	266
DUB20163	DUBRO 163 FOAM TAPE - 3 FT.	.75	.70	161
DUB20164	DUBRO 164 NYLON WING BOLTS (2)	.75	.70	161
DUB20165	DUBRO 165 FLEX CABLE 20 IN.	1.49	1.35	160
DUB20166	DUBRO 166 STEERING ARM LONG	.75	.70	161
DUB20167	DUBRO 167 90D. BELLCRANK ASY-2	.75	.70	160
DUB20168	DUBRO 168 2-56 LOCK NUTS (12)	1.10	1.05	162
DUB20169	DUBRO 169 3-48 LOCK NUTS (12)	1.10	1.05	162
DUB20170	DUBRO 170 4-40 LOCK NUTS (12)	1.10	1.05	162
DUB20171	DUBRO 171 6-32 LOCK NUTS (12)	1.10	1.05	162
DUB20172	DUBRO 172 12 IN. THREADED ROD	.15	.14	160
DUB20173	DUBRO 173 30 IN. THRD RODS(12)	3.60	3.50	160
DUB20174	DUBRO 174 2-56X1/2 BOLT SET -4	.50	.47	162
DUB20175	DUBRO 175 3-48X3/4 BOLT SET -4	.50	.47	162
DUB20176	DUBRO 176 4-40X1-1/4 BLT SET-4	.55	.52	162
DUB20177	DUBRO 177 6-32X1-1/4 BLT SET-4	.55	.52	162
DUB20178	DUBRO 178 SKT BOLT &LN 440X1 4	1.10	1.05	162
DUB20179	DUBRO 179 SKT BOLT &LN 632X1 4	1.10	1.05	162
DUB20180	DUBRO 180 BOLT-ON BALL LINK	.85	.80	163
DUB20181	DUBRO 181 THREADED BALL LINK	.85	.80	163
DUB20182	DUBRO 182 RIVET BALL LINK	.85	.80	163
DUB20183	DUBRO 183 DUAL TAKE-OFF LINK	1.00	.95	163
DUB20184	DUBRO 184 NYLON LINK W/ROD (5)	1.39	1.30	160
DUB20185	DUBRO 185 KWIK LINK 12 IN. (5)	2.25	2.15	160
DUB20186	DUBRO 186 AIL. BALL LINK ASSLY	2.95	2.75	163
DUB20187	DUBRO 187 BALL LINK TOOL	.50	.47	163
DUB20188	DUBRO 188 BALL LINK SOCKET (4)	1.00	.95	163
DUB20189	DUBRO 189 HORN WIRE BALL LINK2	1.75	1.65	163
DUB20190	DUBRO 190 1/16 THRD BALL LINK	.85	.80	163
DUB20191	DUBRO 191 KWIK FILL FUEL PUMP	10.95	7.95	227
DUB20192	DUBRO 192 FUEL CAN FITTINGS	1.75	1.65	227
DUB20201	DUBRO 201 1.75 OZ MODEL CEMENT	.75	.70	178
DUB20203	DUBRO 203 KWIK-SWITCH MOUNT	1.75	1.65	159
DUB20210	DUBRO 210 PROP DRIVE UNIT	100.00	79.95	214
DUB20211	DUBRO 211 KWIK-PUMP SPINNER	2.95	2.80	227
DUB20212	DUBRO 212 LG THRD COUPLER(5)	1.20	1.15	160
DUB20213	DUBRO 213 EXHAUST EXTENSN 6"	3.95	3.55	223
DUB20214	DUBRO 214 WATERPROOF FITINGS-3	1.00	.95	164
DUB20215	DUBRO 215 V-TAIL MIXER	4.95	4.45	164
DUB20216	DUBRO 216 KWIK-HINGE SLOTTER	1.95	1.85	164
DUB20217	DUBRO 217 BAFFLE SET	2.95	2.65	223
DUB20228	DUBRO 228 MINI KWIK LINKS (2)	.39	.37	266
DUB20229	DUBRO 229 MINI LINK W/ROD (1)	.29	.27	266
DUB20230	DUBRO 230 MINI LINK W/ROD (5)	1.39	1.35	266
DUB20231	DUBRO 231 1/2A STRIP AIL LINK.	1.49	1.45	266
DUB20232	DUBRO 232 SPRING COUPLERS .045	.39	.37	266
DUB20233	DUBRO 233 SPRING COUPLERS 1/16	.39	.37	266
DUB20234	DUBRO 234 1/2A STEER. NOSE GR.	2.25	2.15	266
DUB21111	DUBRO WHEEL 1 ONLY 175R 1 3/4	1.45	1.30	262
DUB21112	DUBRO WHEEL 1 ONLY 200R 2 IN.	1.55	1.40	262
DUB21113	DUBRO WHEEL 1 ONLY 225R 2 1/4	1.70	1.55	262
DUB21114	DUBRO WHEEL 1 ONLY 250R 2 1/2	1.80	1.60	262
DUB21115	DUBRO WHEEL 1 ONLY 275R 2 3/4	1.90	1.70	262
DUB21116	DUBRO WHEEL 1 ONLY 300R 3 IN.	2.05	1.85	262
DUB21117	DUBRO WHEEL 1 ONLY 325R 3 1/4	2.15	1.95	262
DUB21118	DUBRO WHEEL 1 ONLY 350R 3 1/2	2.30	2.10	262
DUB21121	DUBRO WHEEL 1 ONLY 175T 1 3/4	1.45	1.30	262
DUB21122	DUBRO WHEEL 1 ONLY 200T 2 IN.	1.55	1.40	262
DUB21123	DUBRO WHEEL 1 ONLY 225T 2 1/4	1.70	1.55	262
DUB21124	DUBRO WHEEL 1 ONLY 250T 2 1/2	1.80	1.60	262
DUB21125	DUBRO WHEEL 1 ONLY 275T 2 3/4	1.90	1.70	262
DUB21126	DUBRO WHEEL 1 ONLY 300T 3 IN.	2.05	1.85	262
DUB21127	DUBRO WHEEL 1 ONLY 325T 3 1/4	2.15	1.95	262
DUB21128	DUBRO WHEEL 1 ONLY 350T 3 1/2	2.30	2.10	262
DUB21143	DUBRO WHEEL 1 ONLY 225S 2 1/4	1.70	1.55	262
DUB21144	DUBRO WHEEL 1 ONLY 250S 2 1/2	1.80	1.60	262
DUB21145	DUBRO WHEEL 1 ONLY 275S 2 3/4	1.90	1.70	262
DUB21146	DUBRO WHEEL 1 ONLY 300S 3 IN.	2.05	1.85	262
DUB21152	DUBRO WHEEL 1 ONLY 400R 4 IN.	3.98	3.95	262
DUB21154	DUBRO WHEEL 1 ONLY 450R 4 1/2	4.98	4.95	262
DUB21156	DUBRO WHEEL 1 ONLY 500R 5 IN.	5.98	5.95	262
DUB21158	DUBRO WHEEL 1 ONLY 550R 5 1/2	6.98	6.95	262
DUB21160	DUBRO WHEEL 1 ONLY 600R 6 IN.	7.98	7.95	262
DUB21211	DUBRO WHEELS-PAIR 175R 1 3/4	2.40	2.15	262
DUB21212	DUBRO WHEELS-PAIR 200R 2 IN.	2.60	2.35	262
DUB21213	DUBRO WHEELS-PAIR 225R 2 1/4	2.80	2.50	262

STOCK NO	DESCRIPTION	RETAIL PRICE	TOWER PRICE	PAGE #
DUB21214	DUBRO WHEELS-PAIR 250R 2 1/2	2.99	2.70	262
DUB21215	DUBRO WHEELS-PAIR 275R 2 3/4	3.20	2.90	262
DUB21216	DUBRO WHEELS-PAIR 300R 3 IN.	3.40	3.05	262
DUB21217	DUBRO WHEELS-PAIR 325R 3 1/4	3.60	3.25	262
DUB21218	DUBRO WHEELS-PAIR 350R 3 1/2	3.80	3.40	262
DUB21221	DUBRO WHEELS-PAIR 175T 1 3/4	2.40	2.15	262
DUB21222	DUBRO WHEELS-PAIR 200T 2 IN.	2.60	2.35	262
DUB21223	DUBRO WHEELS-PAIR 225T 2 1/4	2.80	2.50	262
DUB21224	DUBRO WHEELS-PAIR 250T 2 1/2	2.99	2.70	262
DUB21225	DUBRO WHEELS-PAIR 275T 2 3/4	3.20	2.90	262
DUB21226	DUBRO WHEELS-PAIR 300T 3 IN.	3.40	3.05	262
DUB21227	DUBRO WHEELS-PAIR 325T 3 1/4	3.60	3.25	262
DUB21228	DUBRO WHEELS-PAIR 350T 3 1/2	3.80	3.40	262
DUB21243	DUBRO WHEELS-PAIR 225S 2 1/4	2.80	2.50	262
DUB21244	DUBRO WHEELS-PAIR 250S 2 1/2	3.00	2.70	262
DUB21245	DUBRO WHEELS-PAIR 275S 2 3/4	3.20	2.90	262
DUB21246	DUBRO WHEELS-PAIR 300S 3 IN.	3.40	3.05	262
DUB21252	DUBRO WHEELS-PAIR 400R 4 IN.	7.95	7.25	262
DUB21254	DUBRO WHEELS-PAIR 450R 4 1/2	9.95	8.95	262
DUB21256	DUBRO WHEELS-PAIR 500R 5 IN.	11.95	10.75	262
DUB21258	DUBRO WHEELS-PAIR 550R 5 1/2	13.95	12.50	262
DUB21260	DUBRO WHEELS-PAIR 600R 6 IN.	15.95	14.25	262
DUM09060	DUMAS #506 PITTMAN MOTOR 6V	27.50	21.95	147
DUM09120	DUMAS #507 PITTMAN MOTOR 12V	27.50	21.95	147
DUM15030	DUMAS #503 SPEED CONTROL	22.95	19.50	147
DUM20010	DUMAS #2301 HARDWARE-SK1	24.00	20.40	110
DUM20050	DUMAS #2306 HARDWARE-AVL1	8.50	7.65	110
DUM20070	DUMAS #2309 HARDWARE-DV20	33.00	26.40	110
DUM20080	DUMAS #2310 HARDWARE-PT109	13.00	11.70	111
DUM20090	DUMAS #2311 HARDWARE-TR31,S200	50.00	39.95	111
DUM20110	DUMAS #2312 HARDWARE-TU36	55.00	43.95	111
DUM20120	DUMAS #2315 HARDWARE-AVL40	65.00	51.95	110
DUM20220	DUMAS #2321 HARDWARE-DV40,DV60	44.00	35.20	108
DUM20230	DUMAS #2322 HARDWARE-PP20	28.00	23.80	110
DUM20260	DUMAS #2313 HARDWARE-TU24	40.00	31.95	111
DUM20270	DUMAS #2314 HARDWRE-DV10,SKV10	10.00	9.00	110
DUM20273	DUMAS #2317 HDWR DRAGNFLY MKII	65.00	48.75	108
DUM20290	DUMAS #3701 SAIL CONTROL UNIT	52.00	41.60	112
DUM20325	DUMAS #2325 60 FLEX OUTDRIVE	49.00	39.20	110
DUM20326	DUMAS #2326 10 FLEX OUTDRIVE	15.00	13.50	110
DUM20327	DUMAS #2327 10 FLEX OUTDRIVE	15.00	13.50	110
DUM20328	DUMAS #2328 HARDWARE FOR U-76	47.00	37.60	108
DUM20329	DUMAS #2329 HDWR FOR 40FT USCG	43.00	34.40	111
DUM22000	DUMAS #CJ012 COOL JACKET-COX	3.50	3.30	113
DUM70110	DUMAS #RS30 STAR 30 SAILBOAT	47.00	36.95	112
DUM70120	DUMAS #RS36F EQUATION SAILBOAT	165.00	123.75	112
DUM70125	DUMAS #RS50F BINGO SAILBOAT	250.00	187.50	112
DUM70130	DUMAS #RS51F ETCHELLS SAILBOAT	235.00	176.25	112
DUM70132	DUMAS #1113 HUSON 36 SAILBOAT	155.00	116.25	112
DUM70140	DUMAS #RS219 LIGHTNING	20.00	16.95	112
DUM70210	DUMAS #PT109 PT-109	38.00	31.15	111
DUM70215	DUMAS #1211 DAUNTLESS	59.00	44.25	111
DUM70220	DUMAS #5200 C.G. LIFEBOAT	55.00	41.25	111
DUM70221	DUMAS #1210 40FT C.G. UTILITY	44.00	34.75	111
DUM70225	DUMAS #TC37 TUNA CLIPPER	45.00	35.55	111
DUM70230	DUMAS #TR31 TROJAN CRUISER	60.00	44.95	111
DUM70235	DUMAS #TU24 SHELLY FOSS 24 IN.	41.00	32.40	111
DUM70240	DUMAS #TU36 SHELLY FOSS 36 IN.	75.00	56.25	111
DUM70250	DUMAS #AB1 SWAMP BUGGY	30.00	24.60	111
DUM70255	DUMAS #AB2 LIL SWAMP BUGGY	13.00	11.45	111
DUM70260	DUMAS BIG SWAMP BUGGY	31.00	25.40	108
DUM70310	DUMAS #AVL1 ATLAS VAN LINES	11.00	9.70	110
DUM70315	DUMAS #AVL40 ATLAS VAN LINE 40	53.00	39.75	110
DUM70318	DUMAS #1312 AVL U-76 HYDRO	50.00	37.50	108
DUM70319	DUMAS #1314 ATLAS VAN LINE U-1	47.95	37.95	108
DUM70320	DUMAS #PP20 PAY N PAK	38.00	31.15	110
DUM70325	DUMAS #SK1 SK-DADDLE	42.00	33.20	110
DUM70330	DUMAS #SKV10 VEE BOT. SK-BOAT	16.00	14.10	110
DUM70340	DUMAS #DV10 DEEP VEE 10 MAHOG	11.00	9.70	110
DUM70345	DUMAS #DV20 DEEP VEE 20 PLYWD	30.00	24.60	110
DUM70350	DUMAS #DV40 DEEP VEE 40 PLYWD	47.00	37.15	110
DUM70355	DUMAS #DV60 DEEP VEE 60 PLYWD	65.00	48.75	110
DUM70360	DUMAS #DV20CF COMP DV 20 FIB.	78.00	58.50	110
DUM70365	DUMAS #DV40CF COMP DV 40 FIB.	92.00	68.95	110
DUM70370	DUMAS #DV60CF COMP DV 60 FIB.	100.00	74.95	110
DUM70371	DUMAS #1421 COMP DEEP VEE 21	42.95	33.95	108
DUM70400	DUMAS HOT SHOT 24" TUNNELHULL	30.00	22.50	108
DUM70401	DUMAS #1315 DRAG N FLY 20 MKII	39.95	31.95	108
DUM70413	DUMAS #1313 HOT SHOT 21(GLASS)	67.95	49.95	108
ECO48601	ECONOKOTE #601 RED	6.95	4.85	207
ECO48602	ECONOKOTE #602 ORANGE	6.95	4.85	207
ECO48603	ECONOKOTE #603 YELLOW	6.95	4.85	207
ECO48604	ECONOKOTE #604 WHITE	6.95	4.85	207
ECO48606	ECONOKOTE #606 SKY BLUE	6.95	4.85	207
ECO48607	ECONOKOTE #607 INSIGNIA BLUE	6.95	4.85	207
EDS14001	EDSON ADJUSTABLE MOTOR MOUNT	6.95	6.25	219
EDS27540	EDSON H-5 MNTG. SCREWS 5-40X1	.98	.95	219
EDS27632	EDSON H-6 MNTG. SCREWS 6-32X1	.98	.95	219
ENY01009	ENYA .09 RC ENGINE	36.98	27.75	147
ENY01015	ENYA .15 RC ENGINE	40.98	30.75	147
ENY01019	ENYA .19 RC ENGINE	45.50	34.10	147
ENY01029	ENYA .29 RC ENGINE	50.50	35.35	147
ENY01035	ENYA .35 RC ENGINE	53.50	37.45	147
ENY01040	ENYA .40 BB RC ENGINE	89.98	62.95	147
ENY01119	ENYA .19 BB RC ENGINE	57.98	40.60	147
ENY01129	ENYA .29 BB RC ENGINE	66.98	46.90	147

STOCK NO	DESCRIPTION	RETAIL PRICE	TOWER PRICE	PAGE #
ENY01135	ENYA .35 BB RC ENGINE	69.98	48.95	147
ENY01145	ENYA .45 BB RC ENGINE	89.98	62.95	147
ENY01160	ENYA .60 BB RC ENGINE	117.98	76.70	147
ENY02009	ENYA .09 RC MARINE ENGINE	39.98	29.95	147
ENY02015	ENYA .15 RC MARINE ENGINE	46.98	35.25	147
ENY02019	ENYA .19 RC MARINE ENGINE	51.98	36.40	147
ENY02029	ENYA .29 RC MARINE ENGINE	57.98	40.60	147
ENY02035	ENYA .35 RC MARINE ENGINE	60.98	42.70	147
ENY02040	ENYA .40 BB RC MARINE ENGINE	96.98	62.95	147
ENY02045	ENYA .45 BB RC MARINE ENGINE	96.98	62.95	147
ENY02060	ENYA .60 BB RC G-8 MARINE	131.98	85.80	147
ENY05119	ENYA .19 RC X SCHNL W/MUFFLER	88.98	62.30	147
ENY05125	ENYA .25 RC X SCHNL W/MUFFLER	92.98	60.45	147
ENY05140	ENYA .40 RC X SCHNL W/MUFFLER	126.98	82.55	147
ENY05145	ENYA .45 RC X SCHNL W/MUFFLER	135.98	88.40	147
ENY05149	ENYA .49 RC X SCHNL W/MUFFLER	131.98	85.80	147
ENY05161	ENYA .60 RC XF SCHNEURLE	199.98	129.95	147
ENY08160	ENYA .60 RC BB G-8 ENGINE	124.98	81.25	147
ENY16090	ENYA MUFFLER M-90 FOR 09	5.50	5.20	222
ENY16100	ENYA MUFFLER M-100 FOR 15-19	6.98	6.65	222
ENY16200	ENYA MUFFLER M-200 FOR 29-45	9.25	8.80	222
ENY16300	ENYA MUFFLER M-300 FOR 60	11.98	10.80	222
ENY16310	ENYA MUFFLER 300X FOR .60XF	14.75	13.25	222
EVE19006	EVEREADY #6 1.5 V BATTERY-DRY	3.50	3.30	183
EVE19091	EVEREADY E91 AA PENCELL BATT.	.80	.75	183
EVE19276	EVEREADY #276 9 V TX BATT-DRY	4.70	4.45	183
EVE19711	EVEREADY #711 1.5V BATTERY-DRY	4.30	4.10	183
EVE19735	EVEREADY #735 1.5V BATTERY-DRY	2.78	2.70	183
EXH72000	EXHIB'AIR MITSUBISHI MU-2L	199.95	179.95	87
EXH74000	EXHIB'AIR FAIRCHILD F-27	399.95	299.95	32
FLI22000	FLITEGLAS SPEED REDUCERS (6)	5.95	5.35	267
FLI42000	FLITEGLAS LIQUID MASKING FILM	5.95	5.35	258
FOX00035	FOX #13500 .35 U/C ENGINE	25.95	18.75	148
FOX00136	FOX #13700 .36BB COMBAT U/C	44.95	29.95	148
FOX01015	FOX #21600 .15 RC SCHNEURLE	34.95	24.25	148
FOX01019	FOX #21900 .19 RC ENGINE	31.95	22.35	148
FOX01025	FOX #22500 .25 RC ENGINE	31.95	22.35	148
FOX01029	FOX #22900 .29 RC ENGINE	34.95	24.45	148
FOX01036	FOX #23600 .36 RC ENGINE	34.95	24.45	148
FOX01040	FOX #24000 .40 RC SCHNEURLE	45.95	31.00	148
FOX01045	FOX #24500 .45 RC SCHNEURLE	51.95	35.50	148
FOX01115	FOX #21698 .15 RC SCHNEURL 2BB	55.95	37.75	148
FOX01140	FOX #24100 .40 RC SCHNEURLE BB	64.95	43.85	148
FOX01145	FOX #24600 .45 RC SCHNEURLE BB	64.95	43.85	148
FOX01160	FOX #26099 .60 RC EAGLE ENGINE	64.95	43.85	148
FOX01161	FOX #26199 .60 RC HAWK ENGINE	84.95	55.20	148
FOX01178	FOX #27800 .78 RC ENGINE	96.95	63.00	148
FOX14201	FOX #50201 ENGINE MOUNT	4.50	4.05	219
FOX14203	FOX #50203 ENGINE MOUNT	4.50	4.05	219
FOX14204	FOX #50204 ENGINE MOUNT	4.50	4.05	219
FOX14401	FOX #50401 ENGINE MOUNT	5.00	4.50	219
FOX14402	FOX #50402 ENGINE MOUNT	5.00	4.50	219
FOX14403	FOX #50403 ENGINE MOUNT	5.00	4.50	219
FOX14404	FOX #50404 ENGINE MOUNT	5.00	4.50	219
FOX14601	FOX #50601 ENGINE MOUNT	5.50	4.95	219
FOX14602	FOX #50602 ENGINE MOUNT	5.50	4.95	219
FOX14603	FOX #50603 ENGINE MOUNT	5.50	4.95	219
FOX15101	FOX RC LONG PLUG-ONE ONLY	1.15	1.10	215
FOX15112	FOX RC LONG PLUG-ONE DOZEN	13.80	9.95	215
FOX15201	FOX RC SHORT PLUG-ONE ONLY	1.15	1.10	215
FOX15212	FOX RC SHORT PLUG-ONE DOZEN	13.80	9.95	215
FOX16211	FOX #90211 MUFFLER .15 FT	5.95	4.95	221
FOX16212	FOX #90212 MUFFLER .15 EXP	5.95	4.95	221
FOX16222	FOX #90222 MUFFLER .19-.36 EXP	7.95	6.50	221
FOX16232	FOX #90232 MUFFLER .60 EXP	9.95	7.95	221
FOX16242	FOX #90242 MUFFLER .15 SCHNURL	5.95	4.95	221
FOX16252	FOX #90252 MUFFLER .40&.45 SCH	7.95	6.50	221
FOX16301	FOX #90301 TUNED MUFFLER 15	15.95	12.95	221
FOX16302	FOX #90302 TUNED MUFFLER 29-45	19.95	15.95	221
FOX16303	FOX #90303 TUNED MUFFLER 60-78	24.95	19.95	221
FOX16311	FOX #90311 AFTERMUFFLER 15-19	8.95	7.95	221
FOX16312	FOX #90312 AFTERMUFFLER 25-40	8.95	7.95	221
FOX16313	FOX #90313 AFTERMUFFLER 45-60	8.95	7.95	221
FOX16410	FOX #90410 EXT. 10-32 X 1/2	2.25	2.15	215
FOX16411	FOX #90411 EXT. 10-32 X 3/4	2.25	2.15	215
FOX16412	FOX #90412 EXT. 1/4-28 X 1/2	2.50	2.40	215
FOX16413	FOX #90413 EXT. 1/4-28 X 3/4	2.50	2.40	215
FOX16414	FOX #90414 EXT. 5/16-24 X 1/2	2.75	2.60	215
FOX16415	FOX #90415 EXT. 5/16-24 X 3/4	2.75	2.60	215
FOX18011	FOX #60106 SPINNER CONV 1 1/2	8.00	6.80	256
FOX18012	FOX #60107 SPINNER CONV 1 3/4	8.50	7.25	256
FOX18013	FOX #60108 SPINNER CONV 2	9.00	7.65	256
FOX18014	FOX #60109 SPINNER CONV 2 1/4	9.50	7.95	256
FOX18015	FOX #60110 SPINNER CONV 2 1/2	10.00	8.50	256
FOX18021	FOX #60206 SPINNER S JIM 1 1/2	8.50	7.25	256
FOX18022	FOX #60207 SPINNER S JIM 1 3/4	9.00	7.65	256
FOX18023	FOX #60208 SPINNER S JIM 2	9.50	7.95	256
FOX18024	FOX #60209 SPINNER S JIM 2 1/4	10.00	8.50	256
FOX18025	FOX #60210 SPINNER S JIM 2 1/2	10.50	8.95	256
FOX18031	FOX #60306 SPINNER CONCL 1 1/2	8.00	6.80	256
FOX18032	FOX #60307 SPINNER CONCL 1 3/4	8.50	7.25	256
FOX18033	FOX #60308 SPINNER CONCL 2	9.00	7.65	256
FOX18034	FOX #60309 SPINNER CONCL 2 1/4	9.50	7.95	256
FOX18035	FOX #60310 SPINNER CONCL 2 1/2	10.00	8.50	256
FOX18201	FOX #70201 PROP REAMER 4-STEP	5.95	5.45	248
FOX18202	FOX #70202 PROP REAMER K&B	5.95	5.45	248

STOCK NO	DESCRIPTION	RETAIL PRICE	TOWER PRICE	PAGE #
FOX18401	FOX #60401 SHORT ADAPT 10/32	1.00	.95	256
FOX18402	FOX #60402 MEDIUM ADAPT 10/32	1.00	.95	256
FOX18403	FOX #60403 SHORT ADAPT 1/4X28	1.00	.95	256
FOX18404	FOX #60404 MEDIUM ADAPT 1/4X28	1.00	.95	256
FOX18405	FOX #60405 LONG ADAPT 1/4X28	1.00	.95	256
FOX18406	FOX #60406 MEDIUM ADAP 5/16X24	1.00	.95	256
FOX18407	FOX #60407 LONG ADAPT 5/16X24	1.00	.95	256
FOX18503	FOX #60503 SPINNER NUT 10/32	1.00	.95	256
FOX18504	FOX #60504 SPINNER NUT 1/4	1.25	1.20	256
FOX20331	FOX #90331 COLLARS 3/32 IN (2)	.69	.65	261
FOX20341	FOX #90341 COLLARS 1/8 IN (2)	.69	.65	261
FOX20351	FOX #90351 COLLARS 5/32 IN (2)	.69	.65	261
FOX20361	FOX #90361 COLLARS 3/16 IN (2)	.69	.65	261
FOX20501	FOX #90501 PRESSURE FTNG 4-40	.85	.80	215
FOX20502	FOX #90502 PRESSURE FTNG 6-32	.85	.80	215
FOX27104	FOX #70104 4-WAY WRENCH	7.95	7.15	215
FOX52701	FOX #90701 SMALL FUEL FILTER	1.25	1.20	226
FOX52702	FOX #90702 LARGE FUEL FILTER	1.25	1.20	226
FOX56811	FOX #90811 LUSTROX	.75	.70	215
FUS12001	GLOBEE GBES-1 1/2A STARTER	34.95	26.20	212
FUS12012	GLOBEE GBSC-12 STARTER CHARGER	7.95	6.75	212
FUS15010	GLOBEE GB-5P 1/2A PLUG-SPORT	1.39	1.25	215
FUS15020	GLOBEE GB-5R 1/2A PLUG-RACING	1.79	1.60	215
FUS15100	GLOBEE GB-2S R/C SHORT PLUG	1.25	1.20	215
FUS15200	GLOBEE GB-2L R/C LONG PLUG	1.25	1.20	215
FUS90000	GLOBEE GBFP-1 FIREPLUG	26.95	21.50	184
FUS90001	GLOBEE GBFC-1 FIREPLUG CHARGER	7.95	7.15	184
FUT81150	FUTABA FP-S15M SERVO-BALL BRNG	49.95	42.50	138
FUT81157	FUTABA FP-S15 SERVO-7GN ONLY	49.95	42.50	138
FUT81160	FUTABA FP-S16 SERVO - MINI	39.95	33.95	138
FUT81161	FUTABA FP-S16L SERVO - REVERSE	39.95	33.95	138
FUT81170	FUTABA FP-S17 SERVO - STANDARD	29.95	25.50	138
FUT81200	FUTABA FP-S20 SERVO-ULTRA MINI	39.95	33.95	138
FUT81201	FUTABA FP-S20L SERVO-ULTRAMINI	39.95	33.95	138
FUT81670	FUTABA FP-S7 SERVO WATER-TIGHT	39.95	33.95	138
FUT81671	FUTABA FP-S7L SERVO (REVERSE)	39.95	33.95	138
FUT81680	FUTABA FP-S8 RETRACT SERVO	44.95	37.95	138
FUT81711	FUTABA FP-S11 SERVO (LINEAR)	39.95	33.95	138
FUT81712	FUTABA FP-S12 SERVO	29.95	25.50	138
FUT82611	FUTABA TRAY-TYPE T FOR S6	2.50	2.45	138
FUT82612	FUTABA TRAY-TYPE H FOR S6	1.00	.95	138
FUT82613	FUTABA TRAY-TYPE V FOR S6	1.00	.95	138
FUT82623	FUTABA TRAY-TYPE V FOR S7,S12	1.00	.95	138
FUT82630	FUTABA TRAY - TYPE A FOR S16	3.00	2.85	138
FUT82631	FUTABA TRAY - TYPE T FOR S16	2.50	2.45	138
FUT82632	FUTABA TRAY - TYPE H FOR S16	1.00	.95	138
FUT82633	FUTABA TRAY - TYPE V FOR S16	1.00	.95	138
FUT82640	FUTABA TRAY - TYPE A FOR S17	1.50	1.45	138
FUT82644	FUTABA TRAY - TYPE B FOR S17	1.00	.95	138
FUT83602	FUTABA AEC-1 AILERON EXTENSION	2.95	2.80	138
FUT83605	FUTABA SWH-1 SWITCH HARNESS	5.95	5.75	138
FUT83606	FUTABA AEC-2 Y HARNESS	3.95	3.75	138
FUT83610	FUTABA TRAINER CORD	6.95	6.25	138
FUT83626	FUTABA SERVO GEAR SET FP-S6	2.00	1.95	138
FUT83627	FUTABA SERVO GEAR SET FP-S7	2.00	1.95	138
FUT83629	FUTABA SERVO GEAR SET FP-S16	2.50	2.45	138
FUT86600	FUTABA FBPK-2 NICAD CONV.-2F	54.95	43.95	138
FUT86602	FUTABA FBC-2 DUAL CHARGER	11.95	10.75	138
FUT86622	FUTABA NR-4G 4.8V 225MA NI-CAD	14.95	12.70	138
FUT86650	FUTABA NR-4C 4.8V 500MA NI-CAD	14.95	12.70	138
FUT86722	FAP-22A 2CH AIRBORN PK S-16,7	99.95	74.95	138
FUT86723	FAP-22B 2CH AIRBORN PK S-12,17	84.95	63.95	138
FUT86732	FAP-32A 3CH AIRBORN PK S-16,7	129.95	97.50	138
FUT86764	FUTABA FAP-64 6 CH AIRBORNE PK	229.95	165.00	138
FUT88320	FUTABA FP-2GA 2 CH/2 SERV/2 ST	109.95	82.50	138
FUT88321	FUTABA FP-2F 2 CH/2 SERV/WHEEL	139.95	104.95	138
FUT88322	FUTABA FP-2E 2 CH/2 SERVO/2 ST	139.95	104.95	138
FUT88323	FUTABA FP-2GS 2 CH/2 S-17/2 ST	99.95	76.95	138
FUT88331	FUTABA FP-3S 3 CH/2 SERVO/1 ST	149.95	112.95	138
FUT88332	FUTABA FP-3F 3 CH/2 SERV/2 ST	179.95	129.95	138
FUT88335	FUTABA FP-3FN ALL NICAD	199.95	143.95	138
FUT88341	FUTABA FP-4FN 4 CH/4 S-17/2 ST	269.95	188.95	138
FUT88344	FUTABA FP-4FN 4 CH/4 S-16/2 ST	299.95	209.95	138
FUT88352	FUTABA FP-5FN 5 CH/4 S-16/2 ST	349.95	244.95	138
FUT88361	FUTABA FP-6FN 6 CH/4 S-17/2 ST	319.95	223.95	138
FUT88362	FUTABA FP-6FN 6 CH/4 S-16/2 ST	359.95	251.95	138
FUT88372	FUTABA FP-7GN 7 CH/4 S-15/2 ST	579.95	405.95	138
FUT89671	FUTABA CRYSTALS SET 72.080 MHZ	11.95	11.50	138
FUT89672	FUTABA CRYSTALS SET 72.160 MHZ	11.95	11.50	138
FUT89673	FUTABA CRYSTALS SET 72.240 MHZ	11.95	11.50	138
FUT89674	FUTABA CRYSTALS SET 72.320 MHZ	11.95	11.50	138
FUT89675	FUTABA CRYSTALS SET 72.400 MHZ	11.95	11.50	138
FUT89676	FUTABA CRYSTALS SET 72.960 MHZ	11.95	11.50	138
GAS10002	GAS MODEL PRODUCTS MOTOR KLEEN	4.98	4.70	215
GAS32000	GAS MODEL PRODUCTS 6 MIN EPOXY	6.95	5.95	179
GBE20028	GEE BEE FLOATS 28 IN.	20.95	16.75	234
GBE20033	GEE BEE FLOATS 33 IN.	22.95	18.35	234
GBE73010	GEE BEE RC-01 MALLARD SEAPLANE	46.95	37.50	40
GBE73030	GEE BEE RC-03 SEA HAWK	49.95	39.95	40
GBG18011	GOLDBERG SPINNER 1 1/2 RED	1.10	1.05	257
GBG18012	GOLDBERG SPINNER 1 1/2 BLACK	1.10	1.05	257
GBG18013	GOLDBERG SPINNER 1 1/2 WHITE	1.10	1.05	257
GBG18021	GOLDBERG SPINNER 1 3/4 RED	1.25	1.20	257
GBG18022	GOLDBERG SPINNER 1 3/4 BLACK	1.25	1.20	257
GBG18023	GOLDBERG SPINNER 1 3/4 WHITE	1.25	1.20	257
GBG18031	GOLDBERG SPINNER 2 IN. RED	1.50	1.40	257
GBG18032	GOLDBERG SPINNER 2 IN. BLACK	1.50	1.40	257
GBG18033	GOLDBERG SPINNER 2 IN. WHITE	1.50	1.40	257
GBG18041	GOLDBERG SPINNER 2 1/4 RED	1.75	1.65	257
GBG18042	GOLDBERG SPINNER 2 1/4 BLACK	1.75	1.65	257
GBG18043	GOLDBERG SPINNER 2 1/4 WHITE	1.75	1.65	257
GBG18051	GOLDBERG SPINNER 2 1/2 RED	2.00	1.90	257
GBG18052	GOLDBERG SPINNER 2 1/2 BLACK	2.00	1.90	257
GBG18053	GOLDBERG SPINNER 2 1/2 WHITE	2.00	1.90	257
GBG20101	GOLDBERG N1 NYLON TAPE 3/4 IN	.35	.33	166
GBG20102	GOLDBERG N2 NYLON TAPE 2 1/2	.59	.55	166
GBG20140	GOLDBERG NYLON TAPE 4 IN. N4	.89	.85	166
GBG20141	GOLDBERG NYLON TAPE 6 IN. N6	1.25	1.20	166
GBG20159	GOLDBERG WHITE & BROWN 72.080	.98	.95	166
GBG20160	GOLDBERG WHITE & BLUE 72.160	.98	.95	166
GBG20161	GOLDBERG WHITE & RED 72.240	.98	.95	166
GBG20162	GOLDBERG WHITE & VIOLET 72.320	.98	.95	166
GBG20163	GOLDBERG WHITE & ORANGE 72.400	.98	.95	166
GBG20164	GOLDBERG WHITE & YELLOW 72.960	.98	.95	166
GBG20165	GOLDBERG WHITE & GREEN 75.640	.98	.95	166
GBG20200	GOLDBERG WC-116 COLLARS 1/16''	.89	.85	168
GBG20202	GOLDBERG WC-332 COLLARS 3/32''	.89	.85	168
GBG20204	GOLDBERG WC-180 COLLARS 1/8''	.89	.85	168
GBG20206	GOLDBERG WC-532 COLLARS 5/32''	.89	.85	168
GBG20208	GOLDBERG WC-316 COLLARS 3/16''	.89	.85	168
GBG21101	GOLDBERG W1 WHEEL(1) 1 3/8	.95	.90	262
GBG21102	GOLDBERG W2 WHEEL(1) 1 13/16	1.10	1.05	262
GBG21103	GOLDBERG W3 WHEEL(1) 2 IN.	1.20	1.15	262
GBG21104	GOLDBERG W4 WHEEL(1) 2 3/16	1.30	1.25	262
GBG21105	GOLDBERG W5 WHEEL(1) 2 9/16	1.40	1.35	262
GBG21106	GOLDBERG W6 WHEEL(1) 2 13/16	1.50	1.45	262
GBG21107	GOLDBERG W7 WHEEL(1) 3 1/8	1.60	1.55	262
GBG21201	GOLDBERG W1 WHEELS(2) 1 3/8	1.89	1.80	262
GBG21202	GOLDBERG W2 WHEELS(2) 1 13/16	2.19	2.10	262
GBG21203	GOLDBERG W3 WHEELS(2) 2 IN.	2.39	2.25	262
GBG21204	GOLDBERG W4 WHEELS(2) 2 3/16	2.59	2.45	262
GBG21205	GOLDBERG W5 WHEELS(2) 2 9/16	2.79	2.65	262
GBG21206	GOLDBERG W6 WHEELS(2) 2 13/16	2.99	2.85	262
GBG21207	GOLDBERG W7 WHEELS(2) 3 1/8	3.19	3.05	262
GBG22001	GOLDBERG RG1 RETRACT NOSE GEAR	10.00	8.00	251
GBG22002	GOLDBERG RG2 RETRACT TWIN-GEAR	14.95	10.50	251
GBG22003	GOLDBERG RG3 RETRACT TRI-GEAR	24.95	17.50	251
GBG22004	GOLDBERG RPS1 RETRACT POW SYST	29.95	21.95	251
GBG22005	GOLDBERG AA1 ADJUSTABLE AXLE	.75	.70	167
GBG22006	GOLDBERG OUTPUT ARM FOR RPS-1	.65	.60	251
GBG23000	GOLDBERG PEG3 PUSHROD EXIT AIL	.69	.65	168
GBG23001	GOLDBERG PEG1 PUSHROD EXIT LG.	.75	.70	168
GBG23002	GOLDBERG PEG2 PUSHROD EXIT SM.	.75	.70	168
GBG23003	GOLDBERG SK1 SNAP-R-KEEPER	.50	.45	167
GBG23004	GOLDBERG PC-1 PUSHROD CONECTRS	.98	.95	166
GBG23011	GOLDBERG PEG1H LG. HOODED EXIT	.69	.65	168
GBG23012	GOLDBERG PEG2H SM. HOODED EXIT	.69	.65	168
GBG24207	GOLDBERG RK2-7 KLETT HINGE SM.	1.10	.90	167
GBG24215	GOLDBERG RK2-15 KLETT HINGE SM	1.95	1.60	167
GBG24307	GOLDBERG RK3-7 KLETT HINGE LG	1.25	1.00	167
GBG24315	GOLDBERG RK3-15 KLETT HINGE LG	2.35	1.90	167
GBG24340	GOLDBERG RK4 FLEX FT HNG-SM 18	1.20	1.15	167
GBG24350	GOLDBERG RK5 FLEX FT HNG-MED18	1.20	1.15	167
GBG24400	GOLDBERG HSK-1 HINGE SLOT KIT	1.95	1.85	168
GBG24402	GOLDBERG HM-1 HINGE-LINE MARKR	.50	.45	168
GBG24404	GOLDBERG SF-1 SLOT FORK BLADE	.50	.45	168
GBG24406	GOLDBERG SH-1 SLOT HOOK BLADE	.50	.45	168
GBG25101	GOLDBERG EZ1 LINK W/ROD	.49	.45	167
GBG25102	GOLDBERG EZ2 EZ LINK	.69	.65	167
GBG25103	GOLDBERG EZ3 SOLDER EZ LINK	.69	.65	166
GBG25109	GOLDBERG AP1 1/16 AIL PUSHRODS	.75	.70	166
GBG25201	GOLDBERG LR-1 LINK RODS (6)	.59	.55	167
GBG25301	GOLDBERG SL1 SNAP-LINK W/ROD	.29	.27	167
GBG25302	GOLDBERG SL2 SNAP-LINK	.40	.37	167
GBG25400	GOLDBERG SA-180 1/8 STEER. ARM	.75	.70	167
GBG25401	GOLDBERG MS-1 MINI-SNAP W/ROD	.29	.27	167
GBG25402	GOLDBERG MS2 MINI-SNAP	.40	.37	167
GBG26101	GOLDBERG TB1 TAILWHEEL BRACKET	.40	.37	167
GBG26105	GOLDBERG NMB-1 90 DEG. BRACKET	.50	.47	168
GBG26119	GOLDBERG SN-180 1/8 NOSE GEAR	2.75	2.45	166
GBG26120	GOLDBERG SNA-532 5/32 NOSE SET	3.50	3.15	166
GBG26216	GOLDBERG G16N STEER NOSE GEAR	2.75	2.45	167
GBG26301	GOLDBERG NB532 NOSE GR BEARING	.75	.70	167
GBG26302	GOLDBERG NB180 NOSE GR BEARING	.75	.70	167
GBG26401	GOLDBERG SA532 STEERG ARM 5/32	.75	.70	167
GBG26403	GOLDBERG AHB3 ADJ HORN BRCKT-4	.50	.47	167
GBG27101	GOLDBERG JB6 J-BOLTS & NUTS	.45	.43	167
GBG27106	GOLDBERG LJB6 LONG J-BOLTS	.69	.65	167
GBG27128	GOLDBERG WS-1 WING SKIDS	.50	.47	166
GBG27129	GOLDBERG LGS-38 3/8 GEAR STRAP	.50	.47	166
GBG27130	GOLDBERG LGS-50 1/2 GEAR STRAP	.50	.47	166
GBG27131	GOLDBERG WRS-116 1/16 RETAIN	.39	.37	166
GBG27132	GOLDBERG WRS-332 3/32 RETAIN	.39	.37	166
GBG27136	GOLDBERG LGC-180 LG CLAMPS 1/8	.50	.47	168
GBG27137	GOLDBERG LGC-532 LG CLAMP 5/32	.50	.47	168
GBG27146	GOLDBERG SMS2-50 2X1/2 SCREWS	.40	.37	166
GBG27148	GOLDBERG SMS4-50 4X1/2 SCREWS	.40	.37	166
GBG27201	GOLDBERG SD1 SAFETY DRIVER LG.	.98	.95	167
GBG27202	GOLDBERG SD2 SAFETY DRIVER SM.	.98	.95	167
GBG27302	GOLDBERG SMS2-38 2X3/8 SCREWS	.35	.33	167
GBG27304	GOLDBERG SMS4-40 4X3/8 SCREWS	.35	.33	167
GBG27404	GOLDBERG BN4 #4-40 BLIND NUTS	.35	.33	167

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GBG27406	GOLDBERG SN1 SNAP NUTS (4)	.40	.37	167
GBG27501	GOLDBERG EB1 ENGINE BRACKET	.69	.65	219
GBG28401	GOLDBERG SH-401 4-40X1/8 SCRWS	.49	.47	168
GBG28404	GOLDBERG SH-404 4-40X1/2 SCRWS	.49	.47	168
GBG28406	GOLDBERG SH-406 4-40X3/4 SCRWS	.49	.47	168
GBG28408	GOLDBERG SH-408 4-40X1 SCREWS	.49	.47	168
GBG28410	GOLDBERG SH-410 4-40X1.25 SCRW	.69	.65	168
GBG28412	GOLDBERG SH-412 4-40X1.5 SCRWS	.69	.65	168
GBG28601	GOLDBERG SH-601 6-32X1/8 SCRWS	.69	.65	168
GBG28604	GOLDBERG SH-604 6-32X1/2 SCRWS	.49	.47	168
GBG28606	GOLDBERG SH-606 6-32X3/4 SCRWS	.49	.47	168
GBG28608	GOLDBERG SH-608 6-32X1 SCREWS	.49	.47	168
GBG28610	GOLDBERG SH-610 6-32X1.25 SCRW	.69	.65	168
GBG28612	GOLDBERG SH-612 6-32X1.5 SCRWS	.69	.65	168
GBG29101	GOLDBERG AB1 AILERON BELLCRANK	.59	.55	167
GBG29102	GOLDBERG BCH1 1/2A BELLCRANK	.35	.33	167
GBG29110	GOLDBERG SAH-332 3/32 AIL HORN	.98	.95	166
GBG29201	GOLDBERG CH1 LONG CONTROL HORN	.50	.45	167
GBG29202	GOLDBERG CH2 SMALL CONTRL HORN	.50	.45	167
GBG29204	GOLDBERG AB4 AIL & ELEV HORN	.75	.70	168
GBG29301	GOLDBERG AC1 AILERON COUPLER	.69	.65	168
GBG31000	GOLDBERG BLUE GOO ADHES. 16 OZ	2.95	2.80	179
GBG32000	GOLDBERG JET SUPER GLUE 1/2 OZ	2.95	1.95	179
GBG42211	DJ STRIPE 16R RED 1/16 IN.	1.98	1.90	259
GBG42213	DJ STRIPE 16Y YELLOW 1/16 IN	1.98	1.90	259
GBG42214	DJ STRIPE 16W WHITE 1/16 IN.	1.98	1.90	259
GBG42216	DJ STRIPE 16D DK BLUE 1/16 IN.	1.98	1.90	259
GBG42218	DJ STRIPE 16G GOLD 1/16 IN.	1.98	1.90	259
GBG42219	DJ STRIPE 16B BLACK 1/16 IN.	1.98	1.90	259
GBG42221	DJ STRIPE 3R RED 3/32 IN.	2.69	2.55	259
GBG42223	DJ STRIPE 3Y YELLOW 3/32 IN	2.69	2.55	259
GBG42224	DJ STRIPE 3W WHITE 3/32 IN.	2.69	2.55	259
GBG42226	DJ STRIPE 3D DK BLUE 3/32 IN.	2.69	2.55	259
GBG42228	DJ STRIPE 3G GOLD 3/32 IN.	2.69	2.55	259
GBG42229	DJ STRIPE 3B BLACK 3/32 IN.	2.69	2.55	259
GBG42231	DJ STRIPE 8R RED 1/8 IN.	2.69	2.55	259
GBG42233	DJ STRIPE 8Y YELLOW 1/8 IN.	2.69	2.55	259
GBG42234	DJ STRIPE 8W WHITE 1/8 IN.	2.69	2.55	259
GBG42236	DJ STRIPE 8D DK BLUE 1/8 IN.	2.69	2.55	259
GBG42238	DJ STRIPE 8G GOLD 1/8 IN.	2.69	2.55	259
GBG42239	DJ STRIPE 8B BLACK 1/8 IN.	2.69	2.55	259
GBG42241	DJ STRIPE 4R RED 1/4 IN.	3.69	3.50	259
GBG42243	DJ STRIPE 4Y YELLOW 1/4 IN.	3.69	3.50	259
GBG42244	DJ STRIPE 4W WHITE 1/4 IN.	3.69	3.50	259
GBG42246	DJ STRIPE 4D DK BLUE 1/4 IN.	3.69	3.50	259
GBG42248	DJ STRIPE 4G GOLD 1/4 IN.	3.69	3.50	259
GBG42249	DJ STRIPE 4B BLACK 1/4 IN.	3.69	3.50	259
GBG72001	GOLDBERG PRC-1 RANGER 42 ARF	24.95	19.95	33
GBG72015	GOLDBERG G15 FALCON 56 MKII	39.95	27.50	35
GBG72018	GOLDBERG G18 1/2 A JR. FALCON	13.95	11.50	33
GBG72021	GOLDBERG G21 SKYLARK 56 MKII	44.95	30.95	34
GBG72022	GOLDBERG G22 JUNIOR SKYLARK	14.95	12.25	33
GBG72023	GOLDBERG G23 1/2 A JR. SKYLANE	15.95	12.95	33
GBG72025	GOLDBERG G25 P-40	15.95	12.95	33
GBG73026	GOLDBERG G26 SHOESTRING 54	49.95	37.45	33
GBG73027	GOLDBERG G27 SKYLANE 62	59.95	41.95	33
GBG74016	GOLDBERG G16 SENIOR FALCON	59.95	41.95	33
GBG75015	GOLDBERG G15W WING FALC-SKYLRK	15.95	13.55	33
GBG75016	GOLDBERG G16W WING SR. FALCON	24.95	21.20	33
GBG75027	GOLDBERG G27W WING SKYLANE 62	24.95	21.20	33
GBG90000	GOLDBERG HT-1 HANDI-TOTE	15.95	11.95	235
GBG90001	GOLDBERG MT-1 MINI-TOTE	8.95	6.75	235
GMC72100	GMC MODELS 1/2 A F4U CORSAIR	31.95	24.95	36
GMC72101	GMC MODELS 1/2 A ZERO	31.95	24.95	36
GMC99001	GMC RC TABLE TRAINER	11.95	10.75	125
GRI17022	GRISH WOOD PROP 18X6	7.00	6.30	248
GRI17024	GRISH WOOD PROP 18X8	7.00	6.30	248
GRI17026	GRISH WOOD PROP 18X10	7.00	6.30	248
GRI17042	GRISH WOOD PROP 20X6	8.00	7.20	248
GRI17044	GRISH WOOD PROP 20X8	8.00	7.20	248
GRI17046	GRISH WOOD PROP 20X10	8.00	7.20	248
GRI17062	GRISH WOOD PROP 22X6	10.00	9.00	248
GRI17064	GRISH WOOD PROP 22X8	10.00	9.00	248
GRI17066	GRISH WOOD PROP 22X10	10.00	9.00	248
GRI17082	GRISH WOOD PROP 24X6	13.00	11.70	248
GRI17084	GRISH WOOD PROP 24X8	13.00	11.70	248
GRI17086	GRISH WOOD PROP 24X10	13.00	11.70	248
GRI17113	TORNADO PROP 1 ONLY 5X3	.30	.27	248
GRI17114	TORNADO PROP 1 ONLY 5X4	.30	.27	248
GRI17123	TORNADO PROP 1 ONLY 5-1/2X3	.30	.27	248
GRI17124	TORNADO PROP 1 ONLY 5-1/2X4	.30	.27	248
GRI17133	TORNADO PROP 1 ONLY 6X3	.35	.33	248
GRI17134	TORNADO PROP 1 ONLY 6X4	.35	.33	248
GRI17144	TORNADO PROP 1 ONLY 7X4	.50	.47	248
GRI17146	TORNADO PROP 1 ONLY 7X6	.50	.47	248
GRI17148	TORNADO PROP 1 ONLY 7X8	.50	.47	248
GRI17154	TORNADO PROP 1 ONLY 8X4	.65	.60	248
GRI17156	TORNADO PROP 1 ONLY 8X6	.65	.60	248
GRI17158	TORNADO PROP 1 ONLY 8X8	.65	.60	248
GRI17164	TORNADO PROP 1 ONLY 9X4	.85	.80	248
GRI17166	TORNADO PROP 1 ONLY 9X6	.85	.80	248
GRI17167	TORNADO PROP 1 ONLY 9X7	.85	.80	248
GRI17168	TORNADO PROP 1 ONLY 9X8	.85	.80	248
GRI17174	TORNADO PROP 1 ONLY 10X4	.85	.80	248
GRI17176	TORNADO PROP 1 ONLY 10X6	.85	.80	248
GRI17184	TORNADO PROP 1 ONLY 11X4	1.00	.90	248
GRI17186	TORNADO PROP 1 ONLY 11X6	1.00	.90	248
GRI17188	TORNADO PROP 1 ONLY 11X8	1.00	.90	248
GRI17194	TORNADO PROP 1 ONLY 12X4	1.50	1.35	248
GRI17195	TORNADO PROP 1 ONLY 12X5	1.50	1.35	248
GRI17196	TORNADO PROP 1 ONLY 12X6	1.50	1.35	248
GRI17233	TORNADO PROP 3 BLADE 6X3 TRAC	.50	.45	248
GRI17274	TORNADO PROP 3 BLADE 10X4 TRAC	1.50	1.40	248
GRI17276	TORNADO PROP 3 BLADE 10X6 TRAC	1.50	1.40	248
GRI17333	TORNADO PROP 3 BLADE 6X3 PUSH	.50	.45	248
GRI17376	TORNADO PROP 3 BLADE 10X6 PUSH	1.50	1.40	248
GRI17403	TORNADO PROP 6X3 PUSHER	.35	.33	248
GRI17404	TORNADO PROP 6X4 PUSHER	.35	.33	248
GRI17426	TORNADO PROP 8X6 PUSHER	.85	.80	248
GRI17446	TORNADO PROP 9X6 PUSHER	1.00	.90	248
GRI17456	TORNADO PROP 10X6 PUSHER	1.00	.90	248
HAL26051	HALLCO MED. 7.0 TREAD #B105-1	3.50	3.30	169
HAL26052	HALLCO MED. 8.7 TREAD #B105-2	3.95	3.75	169
HAL26053	HALLCO MED. 10.3 TREAD #B105-3	4.25	4.00	169
HAL26054	HALLCO MED. 12.8 TREAD #B105-4	4.75	4.40	169
HAL26055	HALLCO MED. 15.0 TREAD #B105-5	5.25	4.85	169
HAL26063	HALLCO HVY. 10.3 TREAD #B106-3	4.55	4.30	169
HAL26064	HALLCO HVY. 12.8 TREAD #B106-4	5.25	4.85	169
HAL26065	HALLCO HVY. 15.0 TREAD #B106-5	5.75	5.40	169
HAL26066	HALLCO HVY. 18.0 TREAD #B106-6	6.95	6.25	169
HBE01112	HB #1200 .12 RC W/MUFFLER	32.40	26.55	148
HBE01115	HB #1500 .15 RC W/MUFFLER	35.10	28.75	148
HBE01120	HB #2000 .20 RC W/MUFFLER	40.70	33.35	148
HBE01125	HB #2500 .25 RC W/MUFFLER	45.40	37.20	148
HBE01140	HB #4000 .40 RC	56.40	44.95	148
HBE01150	HB #5000 .50 RC	61.90	49.50	148
HBE01161	HB #6100 .61 RC	83.20	66.55	148
HBE01240	HB #4200 .40 RC PDP	68.40	54.70	148
HBE01261	HB #6300 .61 RC PDP	95.20	74.25	148
HBE02112	HB #1300 .12 RC MARINE W/MUFF	38.90	31.90	148
HBE02120	HB #2100 .20 RC MARINE W/MUFF	52.70	42.15	148
HBE02125	HB #2600 .25 RC MARINE W/MUFF	56.40	44.95	148
HBE02140	HB #4100 .40 RC MARINE	71.20	56.95	148
HBE02161	HB #6200 .61 RC MARINE	98.00	76.45	148
HBE02240	HB #4300 .40 RC PDP MARINE	83.20	66.55	148
HBE02261	HB #6400 .61 RC PDP MARINE	109.90	85.70	148
HBE02421	HB #2200 .21 RC PDP (RACE CAR)	Price unavailable at press time		148
HBE16023	HB #4023 MUFFLER (FITS 40-61)	9.10	7.75	148
HOB32001	HOBBYPOXY FORM 1 EPOXY 1-1/80Z	1.50	1.35	180
HOB32002	HOBBYPOXY FORM 2 EPOXY 8 OZ.	4.00	3.25	180
HOB32004	HOBBYPOXY FORM 4 EPOXY 2 OZ.	2.00	1.70	180
HOB60802	HOBBYPOXY 8 OZ H-02 GLOSS 'B'	2.50	2.30	243
HOB60805	HOBBYPOXY 8 OZ H-05 FLAT 'B'	2.50	2.30	243
HOB60806	HOBBYPOXY 8 OZ H-06 SPRGLS 'B'	2.50	2.30	243
HOB60808	HOBBYPOXY 8 OZ H-08 CLEAR	2.50	2.30	243
HOB60810	HOBBYPOXY 8 OZ H-10 WHITE	2.50	2.30	243
HOB60819	HOBBYPOXY 8 OZ H-19 UNDERCOAT	2.50	2.30	243
HOB60824	HOBBYPOXY 8 OZ H-24 DARK BLUE	2.50	2.30	243
HOB60826	HOBBYPOXY 8 OZ H-26 LIGHT BLUE	2.50	2.30	243
HOB60833	HOBBYPOXY 8 OZ H-33 STIN GREEN	2.50	2.30	243
HOB60847	HOBBYPOXY 8 OZ H-47 BR. YELLOW	2.50	2.30	243
HOB60849	HOBBYPOXY 8 OZ H-49 CUB YELLOW	2.50	2.30	243
HOB60850	HOBBYPOXY 8 OZ H-50 STUFF	1.50	1.40	243
HOB60856	HOBBYPOXY 8 OZ H-56 INT ORANGE	2.50	2.30	243
HOB60865	HOBBYPOXY 8 OZ H-65 BRIGHT RED	2.50	2.30	243
HOB60866	HOBBYPOXY 8 OZ H-66 DARK RED	2.50	2.30	243
HOB60870	HOBBYPOXY 8 OZ H-70 GRAY	2.50	2.30	243
HOB60881	HOBBYPOXY 8 OZ H-81 BLACK	2.50	2.30	243
HOB60890	HOBBYPOXY 8 OZ H-90 FILLER	1.20	1.10	243
HOB60893	HOBBYPOXY 8 OZ H-93 SILVER	2.50	2.30	243
HOB60899	HOBBYPOXY 8 OZ H-99 METALIZER	2.50	2.30	243
HOB61607	HOBBYPOXY PINT H-07 THINNER	1.75	1.55	243
HOB61690	HOBBYPOXY PINT H-90 FILLER	2.00	1.80	243
HOB63207	HOBBYPOXY QUART H-07 THINNER	2.75	2.55	243
HOB63280	HOBBYPOXY QUART H-80 RESIN	5.25	4.75	243
HOB69000	HOBBYPOXY TAC RAG	.55	.50	243
HOT32001	HOT STUFF ADHESIVE HS-1 .5 OZ.	3.50	2.50	180
HOT32002	HOT STUFF TUBING 18 IN. T-500	.50	.45	180
HOT32100	HOT STUFF BLUE LINE HS-5 .5 OZ	4.95	3.95	180
HOU20001	HOUSE OF BALSA 1/4 MDGT DECALS	1.98	1.90	259
HOU71001	HOUSE OF BALSA NOMAD	13.95	11.95	99
HOU71002	HOUSE OF BALSA NOMAD II	19.95	15.95	99
HOU71003	HOUSE OF BALSA SANTANA GLIDER	Price unavailable at press time		99
HOU72003	HOUSE OF BALSA PIETENPOL	49.95	39.95	38
HOU72004	HOUSE OF BALSA 1/2 A P-51 MUST	29.95	24.75	39
HOU72005	HOUSE OF BALSA 1/2 A ME-109	29.95	24.75	39
HOU72006	HOUSE OF BALSA 1/2 A P-47	29.95	24.75	39
HOU72007	HOUSE OF BALSA 1/2 A CHIPMUNK	29.95	24.75	39
HOU72008	HOUSE OF BALSA 1/2 A P-39	29.95	24.75	39
HOU72009	HOUSE OF BALSA 1/2 A BONANZA	29.95	24.75	39
HOU72010	HOUSE OF BALSA 1/2 A FW-190A	29.95	24.75	39
HOU72011	HOUSE OF BALSA 1/2 A P-38	Price unavailable at press time		39
HOU72012	HOUSE OF BALSA 1/2 A P-40	Price unavailable at press time		39
HOU72015	HOUSE OF BALSA 1/2 A PETE K-15	22.95	18.95	39
HOU73000	HOUSE OF BALSA P-51D (29-40)	54.95	43.95	38
HOU73001	HOUSE OF BALSA CHIPMUNK 29-40	Price unavailable at press time		38
JEM73101	JEMCO FAIRCHILD PT-19	54.50	48.95	41
JEM73102	JEMCO P-51 MUSTANG	58.50	52.65	41
JEM73103	JEMCO ME-109	54.50	48.95	41
JEM73104	JEMCO FOCKE WULFE FW-190D-9	58.50	52.65	41
JEM73105	JEMCO AT-6 TEXAN	58.50	52.65	41
JEM74105	JEMCO F4U-1A CORSAIR	68.50	61.65	41

STOCK NO	DESCRIPTION	RETAIL PRICE	TOWER PRICE	PAGE #
JEM74106	JEMCO F6F HELLCAT	68.50	61.65	41
JEN74001	JENSEN DAS UGLY STICK	62.50	46.95	40
JEN75001	JENSEN WING KIT DAS UGLY STICK	26.00	23.40	40
JEN76001	JENSEN FUSE KIT DAS UGLY STICK	28.75	25.85	40
K&B00035	K&B #7860 .35 U/C ENGINE	29.95	20.95	150
K&B01035	K&B #7861 .35 RC ENGINE	34.95	24.50	150
K&B01040	K&B #8011 .40 RC ENGINE	67.50	44.95	151
K&B01041	K&B #8360 .40 RC PRESSURIZED	95.00	62.95	151
K&B01119	K&B #6712 .19 RC ENGINE	50.00	34.95	150
K&B01161	K&B #6525 .61 RC W/MUFFLER	90.00	59.95	151
K&B01162	K&B #6535 .61 RC PRESS. W/MUFF	115.00	76.50	151
K&B02221	K&B #8382 .21 OUTBOARD MARINE	99.50	69.95	150
K&B02321	K&B #8384 .21 RC INBRD MARINE	69.50	50.75	150
K&B02340	K&B #9040 .40 RC SCHN MARINE	99.50	72.50	150
K&B02440	K&B #8060 .40 RC SPORT MARINE	75.00	54.95	150
K&B05121	K&B #8380 .21 RC SCHNRL W/MUFF	67.50	48.60	150
K&B05140	K&B #9000 .40 RC FR R-EX SCHNL	110.00	77.00	151
K&B14004	MARINE 1004 .19 MOTOR MT-4 IN.	5.50	4.95	115
K&B14005	MARINE 1005 .40 MOTOR MT-4 IN.	5.50	4.95	115
K&B14006	MARINE 1006 .40 MOTOR MT-5 IN.	6.60	5.95	115
K&B14007	MARINE 1007 .60 MOTOR MT-5 IN.	6.60	5.95	115
K&B14008	MARINE 1008 QUICK CHANGE MOUNT	18.60	15.80	114
K&B14009	MARINE 1009 MASTER MOUNT ONLY	8.80	7.95	114
K&B14010	MARINE 1010 INSERT ADAPTOR-.40	6.60	5.95	114
K&B14011	MARINE 1011 INSERT ADAPTOR-.60	6.60	5.95	114
K&B15301	K&B #4520 RC LONG PLUG (1)	1.40	1.20	215
K&B15312	K&B #4520 RC LONG PLUG *DOZEN*	16.80	12.00	215
K&B15401	K&B #7321 STD. SHORT PLUG (1)	1.40	1.20	215
K&B15501	K&B #7311 STD. LONG PLUG (1)	1.40	1.20	215
K&B16507	K&B #6507 MUFFLER K&B .19	7.50	6.00	222
K&B16519	K&B #6519 MUFFLER K&B .61	12.50	10.50	222
K&B20030	MARINE 1030 HBR-140 OUTDRIVE	33.00	26.40	114
K&B20031	MARINE 1031 HBR-160 OUTDRIVE	33.00	26.40	114
K&B20032	MARINE 1032 HBR-240 OUTDRIVE	38.50	30.80	114
K&B20033	MARINE 1033 HBR-260 OUTDRIVE	38.50	30.80	114
K&B20034	MARINE 1034 HBRS-140 OUTDRIVE	34.00	27.20	114
K&B20035	MARINE 1035 HBRS-160 OUTDRIVE	34.00	27.20	114
K&B20036	MARINE 1036 HBRS-240 OUTDRIVE	40.50	32.40	114
K&B20037	MARINE 1037 HBRS-260 OUTDRIVE	40.50	32.40	114
K&B68110	SUPERPOXY 8 OZ 8110 CLEAR	3.00	2.90	241
K&B68111	SUPERPOXY 8 OZ 8111 WHITE	3.00	2.90	241
K&B68112	SUPERPOXY 8 OZ 8112 INT ORANGE	3.00	2.90	241
K&B68113	SUPERPOXY 8 OZ 8113 RED	3.00	2.90	241
K&B68114	SUPERPOXY 8 OZ 8114 BLACK	3.00	2.90	241
K&B68115	SUPERPOXY 8 OZ 8115 BLUE	3.00	2.90	241
K&B68116	SUPERPOXY 8 OZ 8116 YELLOW	3.00	2.90	241
K&B68117	SUPERPOXY 8 OZ 8117 PRIMER	2.95	2.85	241
K&B68118	SPXY 8 OZ 8118 SPRAY GLOSS CAT	3.00	2.90	241
K&B68119	SUPERPOXY 8 OZ 8119 PRIMER CAT	2.95	2.85	241
K&B68120	SUPERPOXY PINT 8120 THINNER	2.95	2.85	241
K&B68121	SUPERPOXY QUART 8121 THINNER	4.50	4.30	241
K&B68123	SPXY 8 OZ 8123 SPRAY SATIN CAT	3.00	2.90	241
K&B68126	SUPERPOXY 8 OZ 8126 METL GREEN	3.00	2.90	241
K&B68127	SUPERPOXY 8 OZ 8127 METL BLUE	3.00	2.90	241
K&B68129	SPXY 8 OZ 8129 BRUSH GLOSS CAT	3.00	2.90	241
K&B68131	SPXY 8 OZ 8131 BRUSH SATIN CAT	3.00	2.90	241
K&B68132	SUPERPOXY 8 OZ 8132 PURPLE	3.00	2.90	241
K&B68134	SUPERPOXY 8 OZ 8134 MET. RED	3.00	2.90	241
K&B68136	SUPERPOXY 8 OZ 8136 ALUMINUM	3.00	2.90	241
K&B68150	SUPERPOXY POLYESTER RESIN 1 QT	7.50	6.95	241
K&B68160	K&B #8160 FIB CLOTH LT 3/4 OZ.	3.75	3.65	241
K&B68161	K&B #8161 FIB CLOTH MED 2 OZ.	3.75	3.65	241
K&B68162	K&B #8162 FIB CLOTH HEV 6 OZ.	3.75	3.65	241
K&B68163	K&B MICRO-BALLOONS 2.45 OZ	1.80	1.70	241
K&B68172	K&B MEASURING/MIXING CUPS - 24	1.50	1.40	241
K&B68999	SUPERPOXY COLOR MIXING CHART	.50	.45	241
KAV12100	KAVAN ELECTRIC STARTER	45.00	39.95	212
KAV12200	KAVAN REPLACEMENT RUBBER DRIVE	3.50	3.30	212
KAV77101	KAVAN BELL JET RANGER 'COPTER	400.00	349.95	125
KAV78001	KAVAN GYROSCOPE	84.00	67.20	125
KAV78002	KAVAN POSITION BLINKING LIGHTS	21.00	17.85	125
KAV78003	KAVAN ELECTRONIC FUEL CONTROL	21.00	17.85	125
KAV78201	KAVAN RANGER-MAIN ROTOR BLADES	17.50	14.85	125
KAV78204	KAVAN RANGER-TAIL ROTOR BLADES	3.50	3.30	125
KRA05161	KRAFT .61 RC ENGINE W/MUFFLER	99.95	74.95	142
KRA11135	KRAFT 200-135 61 AIR FILTER	2.98	2.80	215
KRA14050	KRAFT 200-059 ENGINE MT KM-05	2.19	2.00	220
KRA14090	KRAFT 200-060 ENGINE MT KM-09	2.39	2.20	220
KRA14150	KRAFT 200-061 ENGINE MT KM-15	2.49	2.30	220
KRA14155	KRAFT 200-103 ENGINE MT KM-15R	2.79	2.50	220
KRA14190	KRAFT 200-062 ENGINE MT KM-19	2.79	2.50	220
KRA14191	KRAFT 200-063 ENGINE MT KM-19B	2.79	2.50	220
KRA14300	KRAFT 200-064 ENGINE MT KM-30	2.89	2.60	220
KRA14400	KRAFT 200-065 ENGINE MT KM-40	2.98	2.70	220
KRA14401	KRAFT 200-066 ENGINE MT KM-40R	3.29	3.00	220
KRA14601	KRAFT 200-067 ENGINE MT KM-60A	3.29	3.00	220
KRA14602	KRAFT 200-068 ENGINE MT KM-60B	3.29	3.00	220
KRA14700	KRAFT 200-069 ENGINE MT KM-70	3.49	3.20	220
KRA14832	KRAFT 200-132 ALM MT KRA-WEB61	7.98	7.45	220
KRA14863	KRAFT 200-163 ALUM ENG MT .40F	5.49	4.95	220
KRA14864	KRAFT 200-164 ALUM ENG MT .40R	5.49	4.95	220
KRA14865	KRAFT 200-165 ALUM ENG MT .60F	5.98	5.40	220
KRA14866	KRAFT 200-166 ALUM ENG MT .60R	5.98	5.40	220
KRA14867	KRAFT 200-167 ALUM ENG MT .80	5.98	5.40	220
KRA19101	KRAFT 200-119 SQ ANLZR GPA-S	7.98	6.95	209
KRA19102	KRAFT 200-118 RND ANLZR GPA-R	7.98	6.95	209
KRA20087	KRAFT 200-087 ELEVON LINKAGE	3.98	3.75	169
KRA20100	KRAFT 200-100 ACCESSORY ASST	2.49	2.30	169
KRA20105	KRAFT 200-105 POLY HINGES (20)	1.39	1.35	169
KRA20116	KRAFT 200-116 MAN THROT ACT	2.98	2.80	169
KRA20117	KRAFT 200-117 UNVSL ELEVON LKG	3.98	3.75	169
KRA20128	KRAFT 200-128 NYLON CLEVIS	.98	.95	169
KRA20129	KRAFT 200-129 OFFSET ARMS	1.19	1.15	136
KRA20141	KRAFT 200-141 ADJ OUTPUT ARM	1.49	1.40	136
KRA20142	KRAFT 200-142 TRANSMITTER TRAY	19.95	17.95	235
KRA20145	KRAFT 200-145 LONG STICKS (2)	5.98	5.40	136
KRA21273	KRAFT 200-073 SCL WHEELS 1 1/2	2.79	2.60	263
KRA21274	KRAFT 200-074 SCL WHEELS 1 3/4	2.99	2.80	263
KRA21275	KRAFT 200-075 SCL WHEELS 2	3.19	3.00	263
KRA21276	KRAFT 200-076 SCL WHEELS 2 1/4	3.39	3.15	263
KRA21277	KRAFT 200-077 SCL WHEELS 2 1/2	3.39	3.15	263
KRA21278	KRAFT 200-078 SCL WHEELS 2 3/4	3.79	3.50	263
KRA21279	KRAFT 200-079 SCL WHEELS 3	3.99	3.70	263
KRA21280	KRAFT 200-080 SLM WHEELS 2	3.39	3.15	263
KRA21281	KRAFT 200-081 SLM WHEELS 2 1/4	3.79	3.50	263
KRA21282	KRAFT 200-082 SLM WHEELS 2 1/2	3.99	3.70	263
KRA21283	KRAFT 200-083 SLM WHEELS 2 3/4	3.99	3.70	263
KRA21299	KRAFT 200-099 SLM WHEELS 1 3/4	3.19	3.00	263
KRA22007	KRAFT 700-007 RETRT W/LG52 AMP	109.95	94.95	252
KRA33104	KRAFT 200-104 1-1/4 CLAMPS (2)	1.79	1.70	198
KRA33106	KRAFT 200-106 4 IN CLAMP	1.49	1.40	198
KRA52028	KRAFT 200-028 FUEL FILTER	1.29	1.25	228
KRA53004	KRAFT 200-084 FUEL TANK 4 OZ	2.69	2.55	228
KRA53006	KRAFT 200-071 FUEL TANK 6 OZ	2.89	2.75	228
KRA53008	KRAFT 200-070 FUEL TANK 8 OZ	2.89	2.75	228
KRA53011	KRAFT 200-026 FUEL TANK 11 OZ	3.19	3.05	228
KRA53013	KRAFT 200-027 FUEL TANK 13 OZ	3.19	3.05	228
KRA53104	KRAFT 200-148 SLIM TANK 4 OZ	2.69	2.55	228
KRA53108	KRAFT 200-147 SLIM TANK 8 OZ	2.89	2.75	228
KRA53112	KRAFT 200-085 SLIM TANK 12 OZ	3.19	3.05	228
KRA53116	KRAFT 200-146 SLIM TANK 16 OZ	3.69	3.50	228
KRA80125	KRAFT 200-125 14II ACCESS PKG	1.98	1.90	136
KRA80126	KRAFT 200-126 15II ACCESS PKG	1.98	1.90	136
KRA80162	KRAFT 200-162 LONG ARM-14&15II	.79	.75	136
KRA80168	KRAFT 200-168 LG WHEEL-14&15II	.79	.75	136
KRA81110	KRAFT SERVO KPS-11	44.95	34.95	136
KRA81120	KRAFT SERVO KPS-12	44.95	34.95	136
KRA81140	KRAFT SERVO KPS-14II	44.95	34.95	136
KRA81145	KRAFT SERVO KPS-14IIA (A SETS)	39.95	29.95	136
KRA81150	KRAFT SERVO KPS-15II	44.95	34.95	136
KRA81155	KRAFT SERVO KPS-15IIA (A SETS)	39.95	29.95	136
KRA81158	KRAFT SERVO KPS-15H	49.95	38.50	136
KRA81159	KRAFT SERVO KPS-15HA (A SETS)	44.95	33.75	136
KRA81180	KRAFT SERVO KPS-18 MINI	59.95	45.95	136
KRA81185	KRAFT SERVO KPS-18A MINI	59.95	44.95	136
KRA82040	KRAFT 200-040 11 TRAY-SIDE(1)	1.69	1.55	136
KRA82041	KRAFT 200-041 11 TRAY-2X1 (3)	3.19	3.00	136
KRA82042	KRAFT 200-042 11 TRAY-3 ACROSS	3.19	3.00	136
KRA82044	KRAFT 200-044 12 TRAY-SIDE(1)	1.69	1.55	136
KRA82045	KRAFT 200-045 12 TRAY-2X1 (3)	3.19	3.00	136
KRA82046	KRAFT 200-046 12 TRAY-3 ACROSS	3.19	3.00	136
KRA82088	KRAFT 200-088 14 TRAY-3 ACROSS	3.19	3.00	136
KRA82089	KRAFT 200-089 14 TRAY-2X1 (3)	3.19	3.00	136
KRA82090	KRAFT 200-090 14 TRAY-SIDE(1)	1.69	1.55	136
KRA82092	KRAFT 200-092 15 TRAY-3 ACROSS	3.19	3.00	136
KRA82093	KRAFT 200-093 15 TRAY-2X1 (3)	3.19	3.00	136
KRA82094	KRAFT 200-094 15 TRAY-SIDE(1)	1.69	1.55	136
KRA82101	KRAFT 200-101 14 TRAY-VERT.(1)	1.69	1.55	136
KRA82102	KRAFT 200-102 15 TRAY-VERT.(1)	1.69	1.55	136
KRA82120	KRAFT 200-120 TRAY SW ACTUATOR	1.29	1.25	136
KRA83004	KRAFT 350-004 TRAINER SWITCH	12.95	12.25	136
KRA83014	KRAFT 200-149 SW HARNESS-4A&6A	7.95	7.25	136
KRA83015	KRAFT 200-154 MINI SW HARNESS	7.95	7.25	136
KRA83021	KRAFT 200-121 SW HRNSS 7S & UP	7.95	7.25	136
KRA83029	KRAFT 200-029 SW HRNSS 72-74	7.95	7.25	136
KRA83030	KRAFT 200-030 TRAINER CORD	6.98	6.25	136
KRA83035	KRAFT 200-150 AIL EXT-A SERIES	3.00	2.85	136
KRA83036	KRAFT 200-036 AIL EXTENSION	3.50	3.25	136
KRA83037	KRAFT 200-037 SERVO Y CONNECTR	4.98	4.50	136
KRA83050	KRAFT 5C RECEIVER KPR-5C	49.95	45.95	134
KRA83071	KRAFT KPR-7C RECEIVER W/MODULE	89.95	79.95	134
KRA83072	KRAFT KPR-7L RECEIVER-MINI	89.95	79.95	134
KRA83110	KRAFT BATT CHARGER KBC-A(AUTO)	14.95	13.95	136
KRA83125	KRAFT BATT CHARGER KBC-B	14.95	13.95	136
KRA83130	KRAFT WALL TRANSFORMER(A SETS)	5.95	5.35	136
KRA83183	KRAFT 200-183 32IN STD ANTENNA	.98	.95	136
KRA83184	KRAFT 200-184 18IN SM. ANTENNA	1.98	1.90	136
KRA83185	KRAFT 200-185 12IN WHIP ANTENA	2.49	2.35	136
KRA83220	KRAFT BAT PK KB-4E 550 MA STD.	17.95	16.25	136
KRA83225	KRAFT BAT PK KB-4EA 550 MA STD	17.95	16.25	136
KRA83230	KRAFT BAT PK KB-4F 1000 MA	31.95	28.95	136
KRA83235	KRAFT BAT PK KB-4S 450 MA SQ.	17.95	16.25	136
KRA83240	KRAFT BAT PK KB-4M 450 MA OBLG	17.95	16.25	136
KRA83245	KRAFT BAT PK KB-4L 225MA MINI	17.95	16.25	136
KRA83246	KRAFT BAT PK KB-4LA 225MA MINI	17.95	16.25	136
KRA83250	KRAFT BAT PK KB-8D NI-CAD DPT.	29.95	22.95	136
KRA83510	KRAFT TRANSMITTER RF MODULE	24.95	22.45	134
KRA83520	KRAFT RECEIVER RF MODULE	24.95	22.45	134
KRA84140	KRAFT SERVO KPS-14 180 DEGREE	44.95	34.95	136
KRA84150	KRAFT SERVO KPS-15 180 DEGREE	44.95	34.95	136
KRA84158	KRAFT SERVO KPS-15H 180 DEGREE	49.95	38.50	136
KRA84160	KRAFT SERVO KPS-16 180 DEGREE	49.95	38.50	136

PRICE LISTING SECTION

STOCK NO	DESCRIPTION	RETAIL PRICE	TOWER PRICE	PAGE #
KRA88221	KRAFT KP-2AS RADIO (2 CH, 1 ST)	129.95	90.95	132
KRA88222	KRAFT KP-2A RADIO (2 CH, 2 ST)	129.95	90.95	132
KRA88223	KRAFT KP-2AW RADIO (2CH WHEEL)	129.95	90.95	132
KRA88232	KRAFT KP-3C RADIO (3 CH, 2 ST)	219.95	174.95	134
KRA88242	KRAFT KP-4A RADIO (4 CH, 2 ST)	299.95	204.95	132
KRA88251	KRAFT KP-5CS RADIO (5 CH, 1 ST)	375.43	289.95	134
KRA88252	KRAFT KP-5C RADIO (5 CH, 2 ST)	375.43	289.95	134
KRA88262	KRAFT KP-6A RADIO (6 CH, 2 ST)	329.95	229.95	132
KRA88271	KRAFT KP-7CS RADIO (7 CH, 1 ST)	515.43	389.95	134
KRA88272	KRAFT KP-7C RADIO (7 CH, 2 ST)	515.43	389.95	134
KRA88371	KRAFT SIGNATURE SERIES-1 STICK	849.95	775.00	134
KRA88372	KRAFT SIGNATURE SERIES-2 STICK	749.95	685.00	134
LAN42401	LANIER TRIM ASSORTMENT	1.25	1.15	259
LAN72119	LANIER LA119 CESSNA	46.50	34.75	43
LAN72153	LANIER LA153 SCAMP	52.50	39.25	42
LAN73108	LANIER LA108 TRANSIT	44.50	33.50	42
LAN73146	LANIER LA146 PINTO	46.50	34.75	43
LAN73151	LANIER LA154 COMET 35	52.50	39.25	43
LAN74105	LANIER LA105 COMET II	58.50	43.95	43
LAN74116	LANIER LA116 CAPRICE	73.50	55.10	42
LAN74123	LANIER LA124 JESTER II	73.50	55.10	42
LAT90011	LATRAX ALPHA RCX CAR W/RADIO	63.00	52.95	124
LAT90012	LATRAX MUSTANG COBRA W/RADIO	68.50	57.50	124
LAT90040	LATRAX CORVETTE W/NIC. & RADIO	133.50	109.95	124
LAT90306	LATRAX NI-CAD BATT. & CHARGER	19.95	16.95	124
LEI90000	LEISURE 1/8 SCALE DUNE BUGGY	179.95	149.95	119
MAR71001	MARKS MODELS WINDFREE	44.95	32.50	102
MAR71002	MARKS MODELS WINDWARD	32.95	24.25	102
MAR71005	MARKS MODELS WANDERER 72 IN.	19.95	14.75	102
MAR71006	MARKS MODELS WANDERER 99 IN.	29.95	22.50	102
MAR72000	MARKS MODELS SUNNY BIPE	32.95	24.25	44
MAR72004	MARKS MODEL BUSHWACKER W/ACCES	52.95	35.95	44
MAS72000	MASTER-KIT PEPPERMINT PATTIE	42.95	33.95	45
MAS73000	MASTER-KIT STINGER-II BIPLANE	64.95	48.95	45
MAS73100	MASTER-KIT HIPERBIPE	64.95	48.95	45
MAS73200	MASTER-KIT SPARTAN	59.95	44.95	45
MEN19200	MEN 12 VOLT GELL-CELL 6 AMP-HR	26.95	23.95	185
MEN72000	MEN TRAINER (.15-.25)	31.95	23.95	46
MEN73000	MEN BUZZARD BOMBSHELL	49.95	39.95	46
MEN73100	MEN TRAINER 40	49.95	39.95	46
MEN73200	MEN J-3 PIPER CUB	44.95	35.95	46
MFL39000	MICROFLAME 4400 DLX WELD KIT	35.95	30.75	198
MFL39001	MICROFLAME 1001 MICRONOX	1.99	1.90	198
MFL39002	MICROFLAME 1002 BUTANE	1.99	1.90	198
MFL39100	MICROFLAME 3100 BRAZ ROD KIT	5.99	5.40	198
MHH72000	MICHIGAN HOBBY QUICKIE BIPE	35.95	25.25	47
MHH72001	MICHIGAN HOBBY QUICKIE	28.95	20.25	47
MHH72002	MICHIGAN HOBBY SMALL WONDER	35.95	25.15	47
MHH73000	MICHIGAN HOBBY MISS VINTAGE	54.95	38.45	47
MHH73001	MICHIGAN HOBBY NEGOTIATOR	54.95	38.45	47
MHM72001	MILE HIGH MODELS JOY STICK	18.95	15.95	49
MHM72002	MILE HIGH MDLS SUPER JOY STICK	36.95	25.25	49
MHM72003	MILE HIGH MODELS 1/2 A HORNET	20.95	16.75	49
MHM72068	MILE HIGH MODELS P-68 TWIN 049	36.95	25.95	49
MID17049	MIDWEST RK-049 AXIFLO FAN	38.95	31.15	152
MID17400	MIDWEST RK-40 AXIFLO FAN	48.95	38.95	152
MID31016	MIDWEST STYROMATE 16 OZ.	6.50	5.95	241
MID31108	MIDWEST STYROMATE THINNER 8 OZ	2.50	2.25	241
MID38005	BALSA 1/4 X 1/2 X 36 (20)	7.00	6.30	199
MID38015	BALSA 1/4 X 1/4 X 36 (28)	7.00	6.30	199
MID38055	BALSA 1/16 X 3 X 36 (10)	7.00	6.30	199
MID38057	BALSA 3/32 X 3 X 36 (10)	8.50	7.65	199
MID38060	BALSA 1/8 X 3 X 36 (5)	5.00	4.50	199
MID38062	BALSA 3/16 X 3 X 36 (5)	6.00	5.45	199
MID38065	BALSA 1/4 X 3 X 36 (5)	7.00	6.30	199
MID38075	BALSA 1/16 X 4 X 36 (10)	11.50	10.35	199
MID38077	BALSA 3/32 X 4 X 36 (5)	6.25	5.70	199
MID38080	BALSA 1/8 X 4 X 36 (5)	7.50	6.75	199
MID38082	BALSA 3/16 X 4 X 36 (5)	10.75	9.65	199
MID38085	BALSA 1/4 X 4 X 36 (5)	10.50	9.45	199
MID38110	SPRUCE 3/16 X 1/2 X 36 (24)	7.00	6.30	199
MID38115	SPRUCE 1/4 X 1/4 X 36 (28)	7.00	6.30	199
MID38120	SPRUCE 1/4 X 1/2 X 36 (20)	7.00	6.30	199
MID38210	TRIANGULAR STOCK 1/2 X 36 (10)	5.50	4.95	199
MID38220	TRAILING EDGE 1 X 36 (10)	6.00	5.45	199
MID38225	TRAILING EDGE 1-1/2 X 36 (10)	7.00	6.30	199
MID38235	MAPLE 3/8 X 3/8 X 18 (6)	3.90	3.50	199
MID38240	MAPLE 3/8 X 1/2 X 18 (6)	4.20	3.80	199
MID38245	MAPLE 3/8 X 3/4 X 18 (6)	4.80	4.30	199
MID38310	PLYWOOD 1/32 X 6 X 12 (6)	4.80	4.30	199
MID38315	PLYWOOD 1/16 X 6 X 12 (6)	5.10	4.60	199
MID38320	PLYWOOD 1/8 X 6 X 12 (3)	3.60	3.25	199
MID38325	PLYWOOD 1/4 X 6 X 12 (3)	3.60	3.25	199
MID70900	MIDWEST 900 KLAMPON KAI OUTBRD	44.95	31.45	116
MID71000	MIDWEST #140 HAWK SAILPLANE	130.00	97.45	103
MID71131	MIDWEST #131 LIL 'T' GLIDER	26.95	19.55	103
MID71132	MIDWEST #132 SILENT SQUIRE	39.95	27.95	103
MID72106	MIDWEST #106 TRI SQUIRE	29.95	21.75	48
MID72109	MIDWEST #109 LIL TRI SQUIRE	22.95	16.65	48
MID72122	MIDWEST #122 LITTLE STIK	32.95	23.10	48
MID72125	MIDWEST #125 CARDINAL ARF	29.95	21.75	48
MID72126	MIDWEST #126 SUPER CHIPMUNK	29.95	21.75	48
MID73128	MIDWEST #128 SWEET STIK	39.95	27.95	48
MID73130	MIDWEST #130 STRIKEMASTER	69.95	46.85	48
MID73134	MIDWEST #134 ATTACKER	39.95	28.95	48
MID73142	MIDWEST #142 HEINKEL 162	74.95	50.95	48

STOCK NO	DESCRIPTION	RETAIL PRICE	TOWER PRICE	PAGE #
MID73143	MIDWEST #143 TWIN STIK TRAINER	49.95	35.95	48
MID74127	MIDWEST #127 MACH 1	94.95	69.95	48
MID74129	MIDWEST #129 CARDINAL SQUIRE	84.95	62.95	48
MID74131	MIDWEST #131 PITTS SPECIAL	94.95	69.95	48
MIL21237	MILMAN WHEELS #237-T 2 3/8 IN	23.25	22.25	264
MIL21238	MILMAN WHEELS #237-S 2 3/8 IN	22.00	21.00	264
MIL21262	MILMAN WHEELS #262-T 2 5/8 IN	23.25	22.25	264
MIL21263	MILMAN WHEELS #262-S 2 5/8 IN	22.00	21.00	264
MIL21325	MILMAN WHEELS #325-T 3 1/4 IN	25.50	24.50	264
MIL21326	MILMAN WHEELS #325-S 3 1/4 IN	24.25	23.25	264
MIL21350	MILMAN WHEELS #350-T 3 1/2 IN	25.50	24.50	264
MIL21351	MILMAN WHEELS #350-S 3 1/2 IN	24.25	23.25	264
MIL21437	MILMAN WHEELS #437-T 4 3/8 IN	26.50	25.50	264
MIL21438	MILMAN WHEELS #437-S 4 3/8 IN	25.50	24.50	264
MIL21462	MILMAN WHEELS #462-T 4 5/8 IN	26.50	25.50	264
MIL21463	MILMAN WHEELS #462-S 4 5/8 IN	25.50	24.50	264
MIL21475	MILMAN WHEELS #475-T 4 3/4 IN	27.50	26.50	264
MIL21476	MILMAN WHEELS #475-S 4 3/4 IN	26.50	25.50	264
MIL21500	MILMAN WHEELS #500-T 5 IN	27.50	26.50	264
MIL21501	MILMAN WHEELS #500-S 5 IN	26.50	25.50	264
MIL62000	MILLER #2000 COMPRESSOR	63.95	47.95	244
MIL62016	MILLER #2016 SPRAY SET	68.95	51.70	244
MIL62017	MILLER #2017 SPRAY SET	73.95	55.45	244
MIL62018	MILLER #2018 SPRAY SET	73.95	55.45	244
MIL62020	MILLER #2011 SPRAY SET (20SB)	68.95	51.70	244
MIL62040	MILLER #9040 METAL STORAGE BOX	16.95	14.40	244
MIL62060	MILLER #9060 FOOT SWITCH	16.95	14.40	244
MIL62085	MILLER #9080 INFLATOR KIT	4.25	4.15	244
MIL62090	MILLER #9090 ADJ. PRESS. VALVE	4.25	4.00	244
MIL62091	MILLER #9091 HOSE ADAPTOR	2.25	2.15	244
MIL62100	MILLER #AB-100 BRUSH KIT	8.50	7.20	244
MIL62134	MILLER #2134 SPRAY SET	84.95	63.70	244
MIL62140	MILLER #14G SPRAY GUN	7.50	6.35	244
MIL62160	MILLER #16G SPRAY GUN	9.50	7.90	244
MIL62180	MILLER #18G SPRAY GUN	15.95	13.50	244
MIL62381	MILLER #1380 AIR HOSE	4.25	4.15	244
MOD71001	MODEL DYNAMICS GRYPHON	49.95	39.95	52
MON40200	MONOKOTE #200 6 FT CLEAR	9.00	5.60	207
MON40201	MONOKOTE #201 6 FT RED	9.00	5.60	207
MON40202	MONOKOTE #202 6 FT ORANGE	9.00	5.60	207
MON40203	MONOKOTE #203 6 FT YELLOW	9.00	5.60	207
MON40204	MONOKOTE #204 6 FT WHITE	9.00	5.60	207
MON40205	MONOKOTE #205 6 FT ALUMINUM	9.00	5.60	207
MON40206	MONOKOTE #206 6 FT SKY BLUE	9.00	5.60	207
MON40207	MONOKOTE #207 6 FT INSIG BLUE	9.00	5.60	207
MON40208	MONOKOTE #208 6 FT BLACK	9.00	5.60	207
MON40209	MONOKOTE #209 6 FT CHROME	9.00	5.60	207
MON40210	MONOKOTE #210 6 FT OLIVE DRAB	9.00	5.60	207
MON40211	MONOKOTE #211 6 FT DOVE GRAY	9.00	5.60	207
MON40301	MONOKOTE #301 6 FT TRANS RED	9.00	5.60	207
MON40302	MONOKOTE #302 6 FT TRANS ORANG	9.00	5.60	207
MON40303	MONOKOTE #303 6 FT TRANS YELLO	9.00	5.60	207
MON40304	MONOKOTE #304 6 FT TRANS BLUE	9.00	5.60	207
MON40401	MONOKOTE #401 6 FT MET GREEN	10.50	7.25	207
MON40402	MONOKOTE #402 6 FT MET BLUE	10.50	7.25	207
MON40403	MONOKOTE #403 6 FT MET PLUMB	10.50	7.25	207
MON41200	25 FT MONOKOTE CLEAR	37.50	23.95	207
MON41201	25 FT MONOKOTE RED	37.50	23.95	207
MON41202	25 FT MONOKOTE ORANGE	37.50	23.95	207
MON41203	25 FT MONOKOTE YELLOW	37.50	23.95	207
MON41204	25 FT MONOKOTE WHITE	37.50	23.95	207
MON41205	25 FT MONOKOTE ALUMINUM	37.50	23.95	207
MON41206	25 FT MONOKOTE SKY BLUE	37.50	23.95	207
MON41207	25 FT MONOKOTE INSIGNIA BLUE	37.50	23.95	207
MON41208	25 FT MONOKOTE BLACK	37.50	23.95	207
MON41209	25 FT MONOKOTE CHROME	37.50	23.95	207
MON41210	25 FT MONOKOTE OLIVE DRAB	37.50	23.95	207
MON41211	25 FT MONOKOTE DOVE GRAY	37.50	23.95	207
MON41301	25 FT MONOKOTE TRANS RED	37.50	23.95	207
MON41302	25 FT MONOKOTE TRANS ORANGE	37.50	23.95	207
MON41303	25 FT MONOKOTE TRANS YELLOW	37.50	23.95	207
MON41304	25 FT MONOKOTE TRANS BLUE	37.50	23.95	207
MON41401	25 FT MONOKOTE MET GREEN	43.75	27.95	207
MON41402	25 FT MONOKOTE MET BLUE	43.75	27.95	207
MON41403	25 FT MONOKOTE MET PLUMB	43.75	27.95	207
MON42101	MONOKOTE TRIM RED	1.19	1.10	260
MON42102	MONOKOTE TRIM ORANGE	1.19	1.10	260
MON42103	MONOKOTE TRIM YELLOW	1.19	1.10	260
MON42104	MONOKOTE TRIM WHITE	1.19	1.10	260
MON42105	MONOKOTE TRIM ALUMINUM	1.19	1.10	260
MON42106	MONOKOTE TRIM INSIGNIA BLUE	1.19	1.10	260
MON42107	MONOKOTE TRIM GREEN	1.19	1.10	260
MON42108	MONOKOTE TRIM GOLD	1.19	1.10	260
MON42109	MONOKOTE TRIM BLACK	1.19	1.10	260
MON42110	MONOKOTE TRIM CHROME	1.19	1.10	260
MON42111	MONOKOTE TRIM CKBRD RED/WHITE	1.59	1.50	260
MON42112	MONOKOTE TRIM CKBRD RED/CLEAR	1.59	1.50	260
MON42113	MONOKOTE TRIM CKBRD BLK/WHITE	1.59	1.50	260
MON42114	MONOKOTE TRIM CKBRD BLK/CLEAR	1.59	1.50	260
MON42511	MONOKOTE MKNG US AIRFORCE L-11	1.98	1.90	260
MON42512	MONOKOTE MKNG MODERN L-12	3.50	3.25	260
MON42513	MONOKOTE MKNG VINTAGE L-13	3.50	3.25	260
MON42514	MONOKOTE MKNG NAVY BLK. L-14B	1.98	1.90	260
MON42515	MONOKOTE MKNG NAVY WHT. L-14W	1.98	1.90	260
MON42531	MONOKOTE MKNG 1 IN NUMBRS L-31	1.19	1.10	260
MON42532	MONOKOTE MKNG 2 IN NUMBRS L-32	1.39	1.30	260

STOCK NO	DESCRIPTION	RETAIL PRICE	TOWER PRICE	PAGE #
MON42533	MONOKOTE MKNG 3 IN NUMBRS L-33	1.69	1.60	260
MRC05115	MRC SUEVIA 1.5 RC SCHRL W/MUFF	296.95	237.50	153
MRC17000	MRC TURBO TROL WATER JET	59.95	49.95	116
MRC20010	MRC ENGINE TEST BENCH & STAND	44.95	35.95	216
MRC54011	MRC MECHANICAL HAND FUEL PUMP	11.50	9.20	226
MRC72000	MRC RTF FLITE TRAINER W/ENY 15	98.00	83.25	52
MRC73001	MRC RTF CESSNA W/ENYA .35 RC	369.95	295.95	51
MRC73002	MRC RTF CHEROKEE W/ENYA .40 RC	419.95	335.95	50
MRC80100	MRC REMOCALL MONITOR	24.95	22.45	210
MRC81210	MRC MR-10 SERVO - STANDARD	36.95	31.40	140
MRC81242	MRC MR-42 SERVO - FAST	44.95	38.20	140
MRC81260	MRC MR 60 SERVO-MINI	44.95	38.20	140
MRC81270	MRC MR 70 SERVO-BALL BEARING	59.95	50.95	140
MRC82010	MRC ST-1 TRAY-2X1	1.98	1.90	140
MRC82020	MRC ST-2 TRAY-2X2	1.98	1.90	140
MRC82030	MRC ST-3 TRAY-SIDE BY SIDE	1.98	1.90	140
MRC82040	MRC ST-4 TRAY-SINGLE VERTICAL	1.98	1.90	140
MRC82050	MRC ST-5 TRAY-SINGLE HORIZONT.	1.98	1.90	140
MRC82080	MRC ST-8 TRAY PACKAGE FOR MR60	5.40	5.15	140
MRC82090	MRC ST-9 TRAY-SIDE MT FOR MR60	1.35	1.30	140
MRC86207	MRC SWITCH HARNESS W/CHARG JAK	7.95	7.55	140
MRC88222	MRC #772 2 CH/2 ST/2 SERVOS-10	119.95	89.95	140
MRC88223	MRC #772 2 CH/2 ST/2 SERVOS-60	119.95	89.95	140
MRC88225	MRC #765 5 CH/2 ST/4 SERVOS-42	349.95	244.95	140
MRC88226	MRC #765 5 CH/2 ST/4 SERVOS-60	349.95	244.95	140
MRC88235	MRC #775 5 CH/2 ST/4 SERVOS-42	379.95	265.95	140
MRC88236	MRC #775 5 CH/2 ST/4 SERVOS-60	379.95	265.95	140
MRC88242	MRC #774 4 CH/2 ST/4 SERVOS-10	279.95	223.95	140
MRC88243	MRC #774 4 CH/2 ST/4 SERVOS-60	279.95	209.95	140
MRC91003	MRC RA1003 TYRRELL 6 WHEELER	67.98	54.95	122
MRC91201	MRC RA1201 PORSCHE 934 TURBO	64.98	52.65	123
MRC91202	MRC RA1202 MARTINI PORSCHE 935	67.98	54.95	122
MRC91204	MRC RA1204 FMC COMBAT VEHICLE	74.98	60.75	122
MRC91601	MRC RT1601 SHERMAN RC TANK	134.98	109.95	121
MRC91602	MRC RT1602 LEOPARD RC TANK	174.98	139.95	121
MUC20110	MUCKS #63 HARDWARE-LIL DOLPHIN	49.95	39.95	117
MUC20120	MUCKS #65 HRDWE-MIGHTY DOLPHIN	54.95	41.20	117
MUC70100	MUCKS #53 LIL LIGHTNING-WOOD	48.95	36.70	117
MUC70101	MUCKS #56 LIL LIGHTNING-GLASS	92.50	69.35	117
MUC70105	MUCKS #57 MINI DOLPHIN	26.95	22.95	117
MUC70110	MUCKS #55 LIL DOLPHIN	32.95	26.35	117
MUC70120	MUCKS #59 MIGHTY DOLPHIN	49.95	39.95	117
NOS74001	BUD NOSEN AERONCA CHAMP - 9 FT	99.95	79.95	55
NOS74002	BUD NOSEN CESSNA 310 TWIN-10FT	169.95	135.95	55
NOS74003	BUD NOSEN CITABRIA - 9 FT	99.95	79.95	55
NOS74004	BUD NOSEN J-3 CUB - 9 FT	119.95	95.95	55
NOS74005	BUD NOSEN MR. MULLIGAN - 9 FT	139.95	111.95	54
NOS74006	BUD NOSEN GERE SPORT BIPE-8 FT	129.95	103.95	54
NOS74007	BUD NOSEN JENNY - 8 FT	129.95	103.95	54
NOS74008	BUD NOSEN TRAINER 8.5 FT	79.95	63.95	54
NOS74009	BUD NOSEN P-51D - 8.5 FT	169.95	135.95	53
OCT20000	OCTURA KOOL KLAMP #0	5.50	5.10	115
OCT20010	OCTURA KOOL KLAMP #1	5.50	5.10	115
OCT20020	OCTURA KOOL KLAMP #2	5.50	5.10	115
OCT20030	OCTURA KOOL KLAMP #3	5.50	5.10	115
OCT20040	OCTURA KOOL KLAMP #4	5.50	5.10	115
OCT20050	OCTURA KOOL KLAMP #5	5.50	5.10	115
OCT20060	OCTURA KOOL KLAMP #6	5.50	5.10	115
OCT20070	OCTURA KOOL KLAMP #7	5.50	5.10	115
OCT20071	OCTURA BRASS WATER SCOOP #71	1.85	1.80	115
OCT20080	OCTURA KOOL KLAMP #8	5.50	5.10	115
OCT20090	OCTURA KOOL KLAMP #9	5.50	5.10	115
OCT20100	OCTURA KOOL KLAMP #10	5.50	5.10	115
OCT20110	OCTURA KOOL KLAMP #11	5.50	5.10	115
OCT20120	OCTURA KOOL KLAMP #12	5.50	5.10	115
OCT20130	OCTURA KOOL KLAMP #13	5.50	5.10	115
OCT20140	OCTURA KOOL KLAMP #14	5.50	5.10	115
OPS02140	OPS .40 RC MARINE W/TUNED PIPE	142.00	119.95	153
OPS02160	OPS .60 RC MARINE W/TUNED PIPE	179.00	149.95	153
OPS05160	OPS .60 RC BIG RED W/PIPE	155.00	129.95	153
OSM01015	OS MAX .15 RC W/MUFFLER	35.95	28.75	154
OSM01020	OS MAX .20 RC W/MUFFLER	37.95	30.35	154
OSM01025	OS MAX .25 RC ENGINE W/MUFFLER	39.95	31.95	154
OSM01030	OS MAX .30 RC ENGINE W/MUFFLER	45.95	36.75	154
OSM01035	OS MAX .35 RC ENGINE W/MUFFLER	47.95	38.35	154
OSM01140	OS MAX .40 RC ENGINE W/MUFFLER	69.95	55.95	154
OSM01160	OS MAX H60F RC BLCKHEAD W/MUFF	94.95	75.95	154
OSM01210	OS MAX .10 FSR RC W/MUFFLER	28.95	23.15	154
OSM01225	OS MAX .25 FSR RC W/MUFFLER	56.95	45.55	154
OSM01240	OS MAX .40 FSR RC W/MUFFLER	84.95	67.95	154
OSM01245	OS MAX .45 FSR-H RC	89.95	71.95	154
OSM02421	OS MAX .21 FSR RC CAR	59.95	47.95	154
OSM02510	OS MAX .10 FSR RC MARINE W/MUF	35.95	28.75	154
OSM02521	OS MAX .21 FSR RC MARINE	64.95	51.95	154
OSM02620	OS MAX .20 RC MARINE W/O FLYWL	47.95	38.35	154
OSM02630	OS MAX .30 RC MARINE W/O FLYWL	51.95	41.55	154
OSM02640	OS MAX .40 RSR RC MARINE W/FWL	94.95	75.95	154
OSM02645	OS MAX .45 RSR RC MARINE W/FWL	104.95	83.95	154
OSM02660	OS MAX .60 RSR RC MARINE W/FWL	136.95	109.55	154
OSM02665	OS MAX .65 RSR MARINE W/FLYWHL	136.95	109.55	154
OSM03180	OS MAX .80 RC RV ENGINE W/MUFF	136.95	109.55	154
OSM04130	OS MAX .30 RC WANKEL W/MUFFLER	104.95	89.95	154
OSM05145	OS MAX .45 FSR RC W/MUFFLER	89.95	71.95	154
OSM05160	OS MAX .60 FSR RC W/ MUFFLER	114.95	91.95	154
OSM05260	OS MAX .60 FSR RC PRESS. W/MUF	144.95	115.95	154
OSM05360	OS MAX .60 4 CYCLE RC ENGINE	199.95	149.95	154
OSM15030	OS MAX GLO PLUG FOR WANKEL	1.65	1.55	154
OSM15060	OS MAX GLO PLUG FOR 60 4 CYCLE	1.95	1.85	154
OSM16702	OS MAX MUFFLER #702 (15,20,25)	8.50	7.65	222
OSM16703	OS MAX MUFFLER #703 (30,35,40)	11.95	10.15	222
OSM16704	OS MAX MUFFLER #704 (60,80)	12.95	10.95	222
OSM16741	OS MAX MUFFLER #741 BOLT-ON-10	8.95	7.60	222
OSM16743	OS MAX MUFFLER #743 (40SR&FSR)	12.95	10.95	222
OSM16744	OS MAX MUFFLER #744 (60FSR)	12.95	10.95	222
PAC60090	FORMULA U 20090 8 OZ BLACK	2.79	2.60	245
PAC60091	FORMULA U 20091 8 OZ WHITE	2.79	2.60	245
PAC60092	FURMULA U 20092 8 OZ DK RED	2.79	2.60	245
PAC60093	FORMULA U 20093 8 OZ YELLOW	2.79	2.60	245
PAC60094	FORMULA U 20094 8 OZ DK BLUE	2.79	2.60	245
PAC60095	FORMULA U 20095 8 OZ GREEN	2.79	2.60	245
PAC60096	FORMULA U 20096 8 OZ ORANGE	2.79	2.60	245
PAC60097	FORMULA U 20097 8 OZ ALUMINUM	2.79	2.60	245
PAC60098	FORMULA U 20098 8 OZ BRT RED	2.79	2.60	245
PAC60099	FORMULA U 20099 8 OZ LT BLUE	2.79	2.60	245
PAC60100	FORMULA U 20100 8 OZ MET RED	2.79	2.60	245
PAC60101	FORMULA U 20101 8 OZ MET GREEN	2.79	2.60	245
PAC60102	FORMULA U 20102 8 OZ MET GOLD	2.79	2.60	245
PAC60103	FORMULA U 20103 8 OZ FL. O.D.	2.79	2.60	245
PAC60104	FORMULA U 20104 8 OZ FL. TAN	2.79	2.60	245
PAC60105	FORMULA U 20105 8 OZ FL. BLACK	2.79	2.60	245
PAC60106	FORMULA U 20106 8 OZ FL. WHITE	2.79	2.60	245
PAC60107	FORMULA U 20107 8 OZ CLEAR	2.79	2.60	245
PAC60110	FORM U 20110 12 OZ SP BLACK	2.89	2.70	245
PAC60111	FORM U 20111 12 OZ SP WHITE	2.89	2.70	245
PAC60112	FORM U 20112 12 OZ SP DK RED	2.89	2.70	245
PAC60113	FORM U 20113 12 OZ SP YELLOW	2.89	2.70	245
PAC60114	FORM U 20114 12 OZ SP DK BLUE	2.89	2.70	245
PAC60115	FORM U 20115 12 OZ SP GREEN	2.89	2.70	245
PAC60116	FORM U 20116 12 OZ SP ORANGE	2.89	2.70	245
PAC60117	FORM U 20117 12 OZ SP ALUMINUM	2.89	2.70	245
PAC60118	FORM U 20118 12 OZ SP BR RED	2.89	2.70	245
PAC60119	FORM U 20119 12 OZ SP LT BLUE	2.89	2.70	245
PAC60120	FORM U 20120 12 OZ SP MET RED	2.89	2.70	245
PAC60121	FORM U 20121 12 OZ SP MET GRN	2.89	2.70	245
PAC60122	FORM U 20122 12 OZ SP MET GOLD	2.89	2.70	245
PAC60123	FORM U 20123 12 OZ SP FL O.D.	2.89	2.70	245
PAC60124	FORM U 20124 12 OZ SP FL TAN	2.89	2.70	245
PAC60125	FORM U 20125 12 OZ SP FL BLACK	2.89	2.70	245
PAC60126	FORM U 20126 12 OZ SP FL WHITE	2.89	2.70	245
PAC60127	FORM U 20127 12 OZ SP CLEAR	2.89	2.70	245
PAC60130	FORM U 20130 THINNER 1/2 PT.	1.59	1.50	245
PAC60131	FORM U 20131 THINNER 1 PT.	2.39	2.25	245
PAC63004	AEROGLOSS 30-4 FLAT BLACK	1.10	1.05	245
PAC63104	AEROGLOSS 31-4 FLAT WHITE	1.10	1.05	245
PAC63204	AEROGLOSS 32-4 FLAT NAVY BLUE	1.10	1.05	245
PAC63304	AEROGLOSS 33-4 FLAT AERO BLUE	1.10	1.05	245
PAC63404	AEROGLOSS 34-4 FLAT OLIVE DRAB	1.10	1.05	245
PAC63504	AEROGLOSS 35-4 FLAT STORM GRAY	1.10	1.05	245
PAC63604	AEROGLOSS 36-4 FLAT CLOUD GRAY	1.10	1.05	245
PAC63704	AEROGLOSS 37-4 FLAT CRMT GREEN	1.10	1.05	245
PAC63804	AEROGLOSS 38-4 FLAT LGHT EARTH	1.10	1.05	245
PAC63904	AEROGLOSS 39-4 FLAT DARK EARTH	1.10	1.05	245
PAC64004	AEROGLOSS 40-4 FLAT CLEAR	1.10	1.05	245
PAC64308	AEROGLOSS THINNER 8 OZ.	1.55	1.50	245
PAC64316	AEROGLOSS THINNER 16 OZ.	2.35	2.25	245
PAC64332	AEROGLOSS THINNER 32 OZ.	3.75	3.55	245
PAC65008	AEROGLOSS 50-8 SILVAIRE ALUM	1.99	1.90	245
PAC65061	AEROGLOSS 50-16S SILVAIRE ALUM	2.59	2.45	245
PAC65108	AEROGLOSS 51-8 CUB YELLOW	1.99	1.90	245
PAC65161	AEROGLOSS 51-16S CUB YELLOW	2.59	2.45	245
PAC65208	AEROGLOSS 52-8 CUB ORANGE	1.99	1.90	245
PAC65261	AEROGLOSS 52-16S CUB ORANGE	2.59	2.45	245
PAC65308	AEROGLOSS 53-8 STEARMAN RED	1.99	1.90	245
PAC65361	AEROGLOSS 53-16S STEARMAN RED	2.59	2.45	245
PAC65408	AEROGLOSS 54-8 FOKKER RED	1.99	1.90	245
PAC65461	AEROGLOSS 54-16S FOKKER RED	2.59	2.45	245
PAC65704	AEROGLOSS 57-4 CESSNA GREEN	1.10	1.05	245
PAC65808	AEROGLOSS 58-8 STINSON GREEN	1.99	1.90	245
PAC65861	AEROGLOSS 58-16S STINSON GREEN	2.59	2.45	245
PAC65908	AEROGLOSS 59-8 CESSNA GRAY	1.99	1.90	245
PAC66108	AEROGLOSS 61-8 CURTIS BLUE	1.99	1.90	245
PAC66161	AEROGLOSS 61-16S CURTISS BLUE	2.59	2.45	245
PAC66208	AEROGLOSS 62-8 CORSAIR BLUE	1.99	1.90	245
PAC66261	AEROGLOSS 62-16S CORSAIR BLUE	2.59	2.45	245
PAC66308	AEROGLOSS 63-8 JET BLACK	1.99	1.90	245
PAC66361	AEROGLOSS 63-16S JET BLACK	2.59	2.45	245
PAC66408	AEROGLOSS 64-8 SWIFT WHITE	1.99	1.90	245
PAC66416	AEROGLOSS 64-16 SWIFT WHITE	3.29	3.15	245
PAC66461	AEROGLOSS 64-16S SWIFT WHITE	2.59	2.45	245
PAC66532	AEROGLOSS 65-32 CLEAR	5.25	4.95	245
PAC66561	AEROGLOSS 65-16S CLEAR	2.59	2.45	245
PAC66604	AEROGLOSS 66-4 ARMY OLIVE DRAB	1.10	1.05	245
PAC67008	AEROGLOSS 70-8 BALSA FILERCOAT	1.99	1.90	245
PAC67108	AEROGLOSS 71-8 SANDING SEALER	1.99	1.90	245
PAC67208	AEROGLOSS 72-8 BONANZA BLUE	1.99	1.90	245
PAC67408	AEROGLOSS 74-8 ROYAL PURPLE	1.99	1.90	245
PAC67504	AEROGLOSS 75-4 CAMOUFLAGE TAN	1.10	1.05	245
PAC68004	AEROGLOSS 80-4 METALLIC MAROON	1.10	1.05	245
PAC68108	AEROGLOSS 81-8 METALLIC BLUE	1.99	1.90	245
PAC68161	AEROGLOSS 81-16S METALLIC BLUE	2.59	2.45	245
PAC68204	AEROGLOSS 82-4 METALLIC GREEN	1.10	1.05	245
PAC68704	AEROGLOSS 87-4 FUEL PROOFER	1.10	1.05	245

STOCK NO	DESCRIPTION	RETAIL PRICE	TOWER PRICE	PAGE #
PAC68761	AEROGLOSS 87-16S FUEL PROOFER	2.59	2.45	245
PAC68861	AEROGLOSS 88-16S CANDY RED	2.59	2.45	245
PAC68961	AEROGLOSS 89-16S CANDY ORANGE	2.59	2.45	245
PAC69061	AEROGLOSS 90-16S CANDY PURPLE	2.59	2.45	245
PAC69161	AEROGLOSS 91-16S CANDY YELLOW	2.59	2.45	245
PAC69261	AEROGLOSS 92-16S UNDRCOAT GOLD	2.59	2.45	245
PAN39301	PANAVISE MODEL 301 VISE	21.95	17.95	200
PCR32030	PACER X-30 ADHESIVE .36 OZ.	3.50	2.50	181
PCR32050	PACER ZAP GIANT .36 OZ.	3.50	2.50	181
PCR32060	PACER ZAP GOLD 1/2 OZ.	4.95	3.95	181
PCR32100	PACER ZAP ECONO PAK 1 OZ.	5.95	4.50	181
PCR32104	PACER ZIP 5 MIN EPOXY 4 OZ.	2.98	2.65	181
PEL92103	PEERLESS 2103 POP BUGGY	140.00	111.95	120
PEL92128	PEERLESS 2128 ELECTRIC PORSCHE	115.00	91.95	120
PEL92204	PEERLESS 2204 QUICK CHARGER	27.95	23.75	120
PER11101	PERRY CARB 101 ST G 60-71	15.95	12.95	216
PER11103	PERRY CARB 103 WEBRA 61	15.95	12.95	216
PER11104	PERRY CARB 104 VECO 61	17.95	14.50	216
PER11105	PERRY CARB 105 HP 61	15.95	12.95	216
PER11106	PERRY CARB 106 ST 60	15.95	12.95	216
PER11107	PERRY CARB 107 OS MAX 60	15.95	12.95	216
PER11108	PERRY CARB 108 ENYA 60	15.95	12.95	216
PER11109	PERRY CARB 109 ST 51-56	15.95	12.95	216
PER11112	PERRY CARB 112 KRAFT 61	15.95	12.95	216
PER11205	PERRY CARB 205 K&B 40	15.50	12.55	216
PER11206	PERRY CARB 206 ST 40-46	13.50	10.95	216
PER11207	PERRY CARB 207 OS MAX 40	15.50	12.55	216
PER11208	PERRY CARB 208 ENYA 45	13.50	10.95	216
PER11209	PERRY CARB 209 ST G 21-46	13.50	10.95	216
PER11210	PERRY CARB 210 HP 40	13.50	10.95	216
PER11211	PERRY CARB 211 WEBRA 40	13.50	10.95	216
PER11301	PERRY CARB 301 OS MAX 30,35	12.00	9.95	216
PER11302	PERRY CARB 302 OS MAX 25	12.00	9.95	216
PER11303	PERRY CARB 303 OS MAX 20	12.00	9.95	216
PER11305	PERRY CARB 305 OS MAX 15	12.00	9.95	216
PER11306	PERRY CARB 306 ST 20-23	12.00	9.95	216
PER11308	PERRY CARB 308 VECO 19	12.00	9.95	216
PER11313	PERRY CARB 313 ENYA 19	12.00	9.95	216
PER11401	PERRY PRES CARB 900 K&B 61	18.95	15.50	216
PER11402	PERRY PRES CARB 902 OS 60 BH	16.95	13.75	216
PER11403	PERRY PRES CARB 903 WEBRA 61	16.95	13.75	216
PER11405	PERRY PRES CARB 905 ST 51-60	16.95	13.75	216
PER11406	PERRY PRES CARB 906 ST G60-71	16.95	13.75	216
PER11407	PERRY PRES CARB 901 OS 60 FSR	16.95	13.75	216
PER11410	PERRY PRES CARB 910 WEB SP 61	16.95	13.75	216
PER11411	PERRY PRES CARB 911 KRAFT 61	16.95	13.75	216
PER11470	PERRY PRES CARB 907 K&B 40	18.95	15.50	216
PER11501	PERRY AIR CLEANER LARGE 51-71	1.95	1.75	216
PER11502	PERRY AIR CLEANER MEDIUM 15-50	1.95	1.75	216
PER11601	PERRY PRES PUMP 800 K&B 61	23.95	19.25	216
PER11602	PERRY PRES PUMP 802 OS 60 BH	23.95	19.25	216
PER11603	PERRY PRES PUMP 803 WEBRA 61	23.95	19.25	216
PER11605	PERRY PRES PUMP 805 ST 51-60	23.95	19.25	216
PER11606	PERRY PRES PUMP 806 ST G60-71	23.95	19.25	216
PER11607	PERRY PRES PUMP 801 OS 60 FSR	23.95	19.25	216
PER11610	PERRY PRES PUMP 810 WEB SP 61	23.95	19.25	216
PER11611	PERRY PRES PUMP 811 KRAFT 61	23.95	19.25	216
PER11670	PERRY PRES PUMP 807 K&B 40	23.95	19.25	216
PER11900	PERRY NEEDLE VALVES LG&MD CARB	1.20	1.15	216
PER52100	PERRY FUEL FILTER	.95	.85	227
PLA74001	PICA-PLATT RC1 SPITFIRE	79.95	59.95	56
PLA74002	PICA-PLATT RC2 T-28B	79.95	59.95	56
PLA74003	PICA-PLATT RC3 FOCKE WULF 190	79.95	59.95	56
PLA74004	PICA-PLATT RC4 WACO	79.95	59.95	57
PLA74005	PICA-PLATT RC5 DUELIST 2/40	89.95	67.45	57
POW39000	POWR-MITE H.D. ELECTRIC SANDER	34.95	29.95	200
PRA20105	PRATHER #103 1/2 OZ. NOSE WT.	1.69	1.55	170
PRA20110	PRATHER #104 1 OZ. NOSE WT.	1.79	1.65	170
PRA20115	PRATHER #105 1 1/2 OZ. NOSE WT	1.89	1.75	170
PRA20120	PRATHER #106 2 OZ. NOSE WT.	1.99	1.90	170
PRA20260	PRATHER #107 6 OZ. STICK-ON WT	1.98	1.90	170
PRA21010	PRATHER #101 PROP BALANCER	1.98	1.90	248
PRA21020	PRATHER #102 MICRO BALLOONS	1.98	1.90	241
PRA21030	PRATHER MIRACLE MICRO BALLOONS	1.98	1.90	267
PRA21090	PRATHER #109 TRANSMITTER COVER	4.98	4.50	236
PRA21180	PRATHER #118 FLUSH CAMLOC	1.29	1.25	170
PRA21190	PRATHER #119 SUN SHIELD	3.98	3.60	236
PRA21200	PRATHER #120 PROP PITCH GAUGE	32.95	26.50	248
PRA21210	PRATHER #121 DRILL JIG VECO 61	5.95	5.25	220
PRA21220	PRATHER #122 DRILL JIG VECO 19	5.95	5.25	220
PRA21230	PRATHER #123 DRILL JIG K&B 40	5.95	5.25	220
PRA21250	PRATHER #125 DRILL JIG ST 60BH	5.95	5.25	220
PRA21260	PRATHER #126 DRILL JIG ST21-46	5.95	5.25	220
PRA21280	PRATHER #128 DRILL JIG HP 40	5.95	5.25	220
PRA21290	PRATHER #129 DRILL JIG OS 60	5.95	5.25	220
PRA21300	PRATHER #130 DRILL JIG OS 40	5.95	5.25	220
PRA21310	PRATHER #131 DRILL JIG WEB61BH	5.95	5.25	220
PRA21390	PRATHER #139 RACING WHEELS	5.95	5.50	263
PRA21400	PRATHER #140 EPOXY WHEEL PANTS	9.95	9.50	263
PRA21410	PRATHER #141 AXLE RETAINERS	1.98	1.90	263
PRA21470	PRATHER #147 NOSEWHEEL BRAKE	1.49	1.45	263
PRA21490	PRATHER #149 DZUS FASTENERS	1.29	1.25	170
PRA21500	PRATHER #150 NYLON COATED CABL	.98	.95	170
PRA21580	PRATHER #158 SPINNER BALANCER	7.95	7.15	255
PRA72162	PRATHER LT162 1/4 MGT LIL TONY	69.95	55.95	58
PRA73001	PRATHER LIL TONY PYLON RACER	99.95	79.95	58
PRA73148	PRATHER PANTHER #148	99.95	79.95	58
PRA73154	PRATHER POLE CAT TRAINER PC154	29.95	21.95	58
PRC20000	#0 TURNBUCKLE (4)	2.41	2.30	171
PRC20005	#1 TURNBUCKLE (4)	2.51	2.40	171
PRC20010	#2 TURNBUCKLE (4)	2.64	2.50	171
PRC20015	#3 TURNBUCKLE (3)	2.21	2.10	171
PRC20020	#5 TURNBUCKLE (3)	2.41	2.30	171
PRC20025	#6 TURNBUCKLE (3)	2.61	2.50	171
PRC20030	#7 TURNBUCKLE (3)	2.81	2.65	171
PRC20050	#2C TURNBUCKLE (4)	2.77	2.65	171
PRC20055	#3C TURNBUCKLE (3)	2.31	2.20	171
PRC20060	#5C TURNBUCKLE (3)	2.51	2.40	171
PRC20065	#6C TURNBUCKLE (3)	2.70	2.55	171
PRC20070	#7C TURNBUCKLE (3)	2.91	2.75	171
PRC20140	#108 CABLE ANCHOR FITTING (4)	1.20	1.15	171
PRC20145	#109 PULLEY ASSEMBLY	1.30	1.25	171
PRC20150	#110 PULLEY ASSEMBLY	1.30	1.25	171
PRC20205	#201 COCKPIT TRIM	.95	.90	171
PRC20206	#201A COCKPIT TRIM	1.05	1.00	171
PRC20210	#202 RIGGING CABLE-25 FT	2.65	2.50	171
PRC20215	#203 CONTROL CABLE-25 FT	2.65	2.50	171
PRC20250	#210 STRUT BOLT & NUT (4)	.75	.70	171
PRC20320	#312 SWAGE FITTING (20)	1.15	1.10	171
PRC20325	#313 STRUT FITTING (4)	1.20	1.15	171
PRC20326	#313A CABLE ANCHOR FITTING (4)	1.00	.95	171
PRC20350	#321 PULLEY ASSEMBLY	1.35	1.30	171
PRC20351	#321A DOUBLE PULLEY ASSEMBLY	1.55	1.45	171
PRC20360	#322 PULLEY ASSEMBLY	1.05	1.00	171
PRC74505	PROCTOR MINI-ANTIC #505	59.95	47.95	59
PRC74701	PROCTOR ANTIC MONO #701	89.95	71.95	59
PRC74703	PROCTOR ANTIC BIPE #703	106.95	85.55	59
PRC74801	PROCTOR NIEUPORT II #801	164.50	123.40	59
PWR80060	POWER PACER 6 V MODEL 200	59.95	49.95	211
PWR80096	POWER PACER 9.6 V MODEL 300	59.95	49.95	211
PWR80106	POWER PACER 10.8 V MODEL 400	59.95	49.95	211
QUA01200	QUADRA 2 CU IN AIRCRAFT ENGINE	139.95	109.95	155
R+S10016	R+S HOBBY ENGINE CLEANER 16 OZ	2.49	2.25	217
R+S60100	R+S SPONGE BRUSH 1 IN. WIDE	.40	.35	246
R+S60200	R+S SPONGE BRUSH 2 IN. WIDE	.60	.55	246
R+S60801	R+S PAINT 8 OZ RED #P-01	2.99	2.90	246
R+S60802	R+S PAINT 8 OZ LIGHT BLUE P-02	2.99	2.90	246
R+S60803	R+S PAINT 8 OZ ROYAL BLUE P-03	2.99	2.90	246
R+S60804	R+S PAINT 8 OZ YELLOW #P-04	2.99	2.90	246
R+S60805	R+S PAINT 8 OZ ORANGE #P-05	2.99	2.90	246
R+S60806	R+S PAINT 8 OZ LT. GREEN #P-06	2.99	2.90	246
R+S60807	R+S PAINT 8 OZ SPR GREEN #P-07	2.99	2.90	246
R+S60808	R+S PAINT 8 OZ PURPLE #P-08	2.99	2.90	246
R+S60809	R+S PAINT 8 OZ BLACK #P-09	2.99	2.90	246
R+S60810	R+S PAINT 8 OZ WHITE #P-10	2.99	2.90	246
R+S60811	R+S PAINT 8 OZ ALUMINUM #P-11	2.99	2.90	246
R+S60812	R+S PAINT 8 OZ FLAT BLACK P-12	2.99	2.90	246
R+S60813	R+S PAINT 8 OZ FLAT WHITE P-13	2.99	2.90	246
R+S60814	R+S PAINT 8 OZ CLEAR #P-14	2.99	2.90	246
R+S60815	R+S PAINT 8 OZ FLAT SATIN P-15	2.99	2.90	246
R+S60816	R+S PAINT 8 OZ GRAY #P-16	2.99	2.90	246
R+S60831	R+S PC-31 8 OZ TAN	3.49	3.35	246
R+S60832	R+S PC-32 8 OZ MIDDLESTONE	3.49	3.35	246
R+S60833	R+S PC-33 8 OZ DARK EARTH	3.49	3.35	246
R+S60834	R+S PC-34 8 OZ LT. BLUE	3.49	3.35	246
R+S60835	R+S PC-35 8 OZ ASURE BLUE	3.49	3.35	246
R+S60836	R+S PC-36 8 OZ GREY	3.49	3.35	246
R+S60837	R+S PC-37 8 OZ NUT GREY	3.49	3.35	246
R+S60838	R+S PC-38 8 OZ LT SL GRAY	3.49	3.35	246
R+S60839	R+S PC-39 8 OZ DK SL GRAY	3.49	3.35	246
R+S60840	R+S PC-40 8 OZ DARK GREEN	3.49	3.35	246
R+S60841	R+S PC-41 8 OZ NAVY GREEN	3.49	3.35	246
R+S60842	R+S PC-42 8 OZ OLIVE DRAB	3.49	3.35	246
R+S60843	R+S PC-43 8 OZ FLAT CLEAR	3.49	3.35	246
R+S60844	R+S PC-44 8 OZ SEA BLUE	3.49	3.35	246
R+S60845	R+S PC-45 8 OZ INTERNATNL BLUE	3.49	3.35	246
R+S61201	R+S 12 OZ SPRAY #P-01 RED	3.79	3.60	246
R+S61202	R+S 12 OZ SPRAY #P-02 LT BLUE	3.79	3.60	246
R+S61203	R+S 12 OZ SPRAY #P-03 RYL BLUE	3.79	3.60	246
R+S61204	R+S 12 OZ SPRAY #P-04 YELLOW	3.79	3.60	246
R+S61205	R+S 12 OZ SPRAY #P-05 ORANGE	3.79	3.60	246
R+S61206	R+S 12 OZ SPRAY #P-06 LT GREEN	3.79	3.60	246
R+S61207	R+S 12 OZ SPRAY #P-07 SP GREEN	3.79	3.60	246
R+S61208	R+S 12 OZ SPRAY #P-08 PURPLE	3.79	3.60	246
R+S61209	R+S 12 OZ SPRAY #P-09 BLACK	3.79	3.60	246
R+S61210	R+S 12 OZ SPRAY #P-10 WHITE	3.79	3.60	246
R+S61211	R+S 12 OZ SPRAY #P-11 ALUMINUM	3.79	3.60	246
R+S61212	R+S 12 OZ SPRAY #P-12 FL BLACK	3.79	3.60	246
R+S61213	R+S 12 OZ SPRAY #P-13 FL WHITE	3.79	3.60	246
R+S61214	R+S 12 OZ SPRAY #P-14 CLEAR	3.79	3.60	246
R+S61215	R+S 12 OZ SPRAY #P-15 FL SATIN	3.79	3.60	246
R+S61216	R+S 12 OZ SPRAY #P-16 GRAY	3.79	3.60	246
R+S61231	R+S 12 OZ SPRAY #PC-31 TAN	3.99	3.80	246
R+S61232	R+S 12 OZ SPRAY #PC-32 MIDLSTN	3.99	3.80	246
R+S61233	R+S 12 OZ SPRAY PC-33 DK EARTH	3.99	3.80	246
R+S61234	R+S 12 OZ SPRAY PC-34 LT BLUE	3.99	3.80	246
R+S61235	R+S 12 OZ SPRAY PC-35 AZUR BLU	3.99	3.80	246
R+S61236	R+S 12 OZ SPRAY PC-36 GREY	3.99	3.80	246
R+S61237	R+S 12 OZ SPRAY PC-37 NUT GREY	3.99	3.80	246
R+S61238	R+S 12 OZ SPRAY PC-38 LT GREY	3.99	3.80	246
R+S61239	R+S 12 OZ SPRAY PC-39 DK GREY	3.99	3.80	246
R+S61240	R+S 12 OZ SPRAY PC-40 DK GREEN	3.99	3.80	246

STOCK NO	DESCRIPTION	RETAIL PRICE	TOWER PRICE	PAGE #
R+S61241	R+S 12 OZ SPRAY PC-41 NAVY GRN	3.99	3.80	246
R+S61242	R+S 12 OZ SPRAY PC-42 OLIV DRB	3.99	3.80	246
R+S61243	R+S 12 OZ SPRAY PC-43 FL CLEAR	3.99	3.80	246
R+S61244	R+S 12 OZ SPRAY PC-44 SEA BLUE	3.99	3.80	246
R+S61245	R+S 12 OZ SPRAY PC-45 INT BLUE	3.99	3.80	246
R+S61600	R+S PAINT THINNER PINT	2.20	2.10	246
R+S63200	R+S PAINT THINNER QUART	3.20	2.90	246
R+S74000	R+S F-16A JET FIGHTER-DELUXE	129.95	97.50	60
R+S74100	R+S MIG-21 JET FIGHTER-DELUXE	129.95	97.50	60
R+S74200	R+S F-5 JET FIGHTER-DELUXE	129.95	97.50	60
RCG90076	R/C BUYER'S GUIDE	5.25	5.25	188
RCM90001	RCM FLIGHT TRAINING COURSE	10.00	10.00	187
RCM90002	RCM FLIGHT TRAINING COURSE II	10.00	10.00	187
RCM90003	RCM SCALE REFERENCE GUIDE	4.50	4.50	187
RCM90004	RCM THE RC ENGINE	3.95	3.95	187
RCM90005	RCM THE RC ENGINE-VOLUME II	6.95	6.95	187
RCM90006	RCM SCALE IN HAND	3.50	3.50	187
RCM90007	RCM FOAM WINGS	3.50	3.50	187
RCM90011	RCM FOR WHAT IT'S WORTH-VOL IV	6.95	6.95	187
RCM90012	RCM RC FROM THE GROUND UP	.50	.50	187
RCS20004	ROCKET CITY #04 WHEEL BRAKES	3.00	2.80	172
RCS20026	ROCKET CITY #26 STICK TIPS KRA	.59	.55	172
RCS20027	ROCKET CITY #27 ANTENNA EXIT	.59	.55	172
RCS20028	ROCKET CITY #28 THROTLE DETENT	1.29	1.15	172
RCS20030	ROCKET CITY #30 RAZOR BLADES	.79	.75	172
RCS20032	ROCKET CITY #32 SWITCH LOCK TX	1.59	1.45	172
RCS20037	ROCKET CITY #37 EPOXY BRUSHES	.98	.95	172
RCS20038	ROCKET CITY #38 WING TAPE	.59	.55	172
RCS20054	ROCKET CITY #54 SWITCH MOUNT	1.29	1.15	172
RCS20055	ROCKET CITY #55 PIN CLAMP	.59	.55	172
RCS23006	ROCKET CITY #06 PUSH ROD ENDS	.79	.75	172
RCS23007	ROCKET CITY #07 RETAINERS	.59	.55	172
RCS23008	ROCKET CITY #08 PUSH ROD EXITS	.59	.55	172
RCS24021	ROCKET CITY #21 NYLON HINGE	.59	.55	172
RCS25011	ROCKET CITY #11 MISSING LINK	.79	.75	172
RCS25012	ROCKET CITY #12 LINK LESS HDWE	.79	.75	172
RCS26009	ROCKET CITY #09 STEERING ARM	.79	.75	172
RCS26010	ROCKET CITY #10 STEERING ARM	.79	.75	172
RCS27022	ROCKET CITY #22 BOLTS 1/4-20	.79	.75	172
RCS27035	ROCKET CITY #35 BOLTS 1/4-20 0	.79	.75	172
RCS27036	ROCKET CITY #36 BOLTS 10-24 OV	.59	.55	172
RCS28014	ROCKET CITY #14 SERVO TAPE 1/8	.79	.75	172
RCS28019	ROCKET CITY #19 OVERRIDE WORLD	.98	.95	172
RCS28031	ROCKET CITY #31 SERVO ARMS KRA	.98	.95	172
RCS28042	ROCKET CITY #42 ARM WORLD	1.29	1.20	172
RCS28044	ROCKET CITY #44 ARM KPS-11	.98	.95	172
RCS28045	ROCKET CITY #45 ARM KPS-12	.98	.95	172
RCS28046	ROCKET CITY #46 ARM KPS-14&15	.98	.95	172
RCS28047	ROCKET CITY #47 ARM WORLD ENG.	.98	.95	172
RCS28052	ROCKET CITY #52 OVRD KPS-14&15	.98	.95	172
RCS28056	ROCKET CITY #56 ARM EK	.98	.95	172
RCS28060	ROCKET CITY #60 ARMS KPS 14&15	.98	.95	172
RCS28061	ROCKET CITY #61 ARMS WORLD ENG	.98	.95	172
RCS28063	RCKT CTY #63 ARMS KPS 14&15 II	.98	.95	172
RCS28064	ROCK CTY #64 ARM KPS 14&15 II	.98	.95	172
RCS28065	RKT CTY #65 OVRD KPS 14&15II	.98	.95	172
RCS28066	ROCKET CITY #66 ARMS EK	.98	.95	172
RCS28071	ROCK CTY #71 ARM KPS 14&15 II	1.29	1.25	172
RCS28075	ROCKET CITY #75 SERV TAPE 1/16	.79	.75	172
RCS29001	ROCKET CITY #01 STANDARD HORNS	.59	.55	172
RCS29003	ROCKET CITY #03 MINI HORNS	.79	.75	172
RCS29005	ROCKET CITY #05 AILERON LINKS	.79	.75	172
RCS29025	ROCKET CITY #25 BRACKET NOSE	.59	.55	172
RCS29029	ROCKET CITY #29 SWIVEL LINKS	1.59	1.45	172
RCS29034	ROCKET CITY #34 AIL LINKS N/TH	1.59	1.45	172
RCS29039	ROCKET CITY #39 LINKS W/O HORN	1.29	1.20	172
RCS29069	ROCKET CITY #69 SWIV W/O HORNS	.98	.95	172
RCS55049	ROCKET CITY #49 TUBE SILI 30FT	15.00	12.75	227
REV17140	REV-UP PROP 'PRO' (1) 9X4	1.39	1.35	248
REV17142	REV-UP PROP 'PRO' (1) 9X6	1.39	1.35	248
REV17146	REV-UP PROP 'PRO' (1) 9X7	1.39	1.35	248
REV17152	REV-UP PROP 'PRO' (1) 10X6	1.49	1.45	248
REV17153	REV-UP PROP 'PRO' (1) 10X6W	1.49	1.45	248
REV17154	REV-UP PROP 'PRO' (1) 10X6EW	1.59	1.55	248
REV17162	REV-UP PROP 'PRO' (1) 11X6	1.59	1.55	248
REV17166	REV-UP PROP 'PRO' (1) 11X7	1.59	1.55	248
REV17167	REV-UP PROP 'PRO' (1) 11X7.5	1.59	1.55	248
REV17168	REV-UP PROP 'PRO' (1) 11X7.75	1.59	1.55	248
REV17169	REV-UP PROP 'PRO' (1) 11X8	1.59	1.55	248
ROB20101	ROBART SUPER STAND	4.98	4.95	236
ROB20201	ROBART SCALE GR STRUT SGSM1 LG	1.98	1.85	236
ROB20202	ROBART SCALE GR STRUT SGSM2 SM	1.98	1.85	236
ROB20301	ROBART SCALE GR STRUT SGST1 LG	2.49	2.35	236
ROB20302	ROBART SCALE GR STRUT SGST2 SM	2.49	2.35	236
ROB21125	ROBART U250-1 ONLY 2-1/2 IN	2.50	2.45	264
ROB21127	ROBART U275-1 ONLY 2/3/4 IN	2.60	2.55	264
ROB21130	ROBART U300-1 ONLY 3 IN	2.75	2.70	264
ROB21132	ROBART U325-1 ONLY 3-1/4 IN	2.90	2.86	264
ROB21135	ROBART U350-1 ONLY 3-1/2 IN	3.10	3.05	264
ROB21137	ROBART U375-1 ONLY 3-3/4 IN	3.30	3.25	264
ROB21225	ROBART U250 PAIR 2-1/2 IN	4.99	4.50	264
ROB21227	ROBART U275 PAIR 2-3/4 IN	5.19	4.65	264
ROB21230	ROBART U300 PAIR 3 IN	5.49	4.95	264
ROB21232	ROBART U325 PAIR 3-1/4 IN	5.79	5.20	264
ROB21235	ROBART U350 PAIR 3-1/2 IN	6.19	5.65	264
ROB21237	ROBART U375 PAIR 3-3/4 IN	6.59	5.95	264

STOCK NO	DESCRIPTION	RETAIL PRICE	TOWER PRICE	PAGE #
ROB22002	ROBART 1/2 A RETRACT MAIN GEAR	16.95	13.55	252
ROB22003	ROBART 1/2 A RETRACT TRI GEAR	25.95	20.75	252
ROB22090	ROBART 90 DEG ROT. RETRACTS(2)	49.95	37.50	252
ROB24215	ROBART HINGE POINTS (15)	1.95	1.75	173
ROB24315	ROBART MINI HINGE POINTS (15)	1.79	1.60	173
ROB24415	ROBART HINGE POINT FLATS (15)	1.49	1.45	173
ROB24504	ROBART HORNY HINGE POINTS (4)	.79	.75	173
ROB24600	ROBART PUSHROD TURNBUCKLE PT69	.69	.65	173
ROB24610	ROBART WATERPROOF BUSHING	2.49	2.25	173
ROB24704	ROBART SERVO ARM KPS 14,15	1.49	1.45	173
ROB24705	ROBART SERVO ARM KPS 14,15 II	1.49	1.45	173
ROB24706	ROBART SERVO ARM WORLD,FP6&7	1.49	1.45	173
ROB24707	ROBART SERVO ARM MRC	1.49	1.45	173
ROB24708	ROBART SERVO ARM EK	1.49	1.45	173
ROB24709	ROBART SERVO ARM CIRRUS	1.49	1.45	173
ROB26000	ROBART RETRACTABLE TAILWHEEL	9.95	7.95	252
ROB39000	ROBART INCIDENCE METER	13.95	10.95	199
ROB50000	ROBART SUPER FUELER	1.98	1.90	228
ROB51000	ROBART ULTRA FUELER	3.98	3.60	228
ROB54000	ROBART SUPER PUMPER MARK II	17.95	14.35	228
ROB54100	ROBART 1/2 A SUPER PUMPER	15.95	12.75	228
ROM22073	RHOM 1073 COLOR CODED TUBING	3.85	3.75	253
ROM22100	RHOM 1001FW 2 GEAR FOR FW-190	82.50	60.50	253
ROM22101	RHOM 1001 2 GEAR - MAINS	79.95	57.75	253
ROM22102	RHOM 1001FAI 2 GEAR - SLIMLINE	79.95	57.75	253
ROM22104	RHOM 1000 3 GEAR - FIREWALL	114.95	79.95	253
ROM22105	RHOM 1000BM 3 GEAR-FLAT MOUNT	114.95	79.95	253
ROM22106	RHOM 1001 90-DEG 2-GR ROTATING	114.95	79.95	253
ROM22107	RHOM 1000 90-DEG 3-GR ROTATING	139.95	109.95	253
ROM22108	RHOM 90 D. TURN GR. CONVERSION	24.95	22.45	253
ROM22114	RHOM 1004 NOSE GEAR - FIREWALL	42.50	33.95	253
ROM22115	RHOM 1005 NOSE GEAR-FLAT MOUNT	42.50	33.95	253
ROM22169	RHOM 1069 PRESSURE GAUGE	14.95	13.95	253
ROM22182	RHOM 1082 FREON - 14 OZ.	3.00	2.75	253
ROM22184	RHOM 1084 OIL 1-1/4 OZ.	1.75	1.65	253
ROM22185	RHOM 1085 LINE COUPLER- 1 ONLY	2.00	1.90	253
ROS05160	ROSSI .60 RC ENGINE	136.95	109.95	155
ROS16060	ROSSI TUNED PIPE(SIDE EXH. 60)	29.95	26.95	155
ROY19000	ROYAL PHOTOCELL TACHOMETER	34.95	31.45	211
ROY44301	ROYAL LIGHT SILK WHITE 2 YD.	8.69	6.50	204
ROY44302	ROYAL LIGHT SILK RED 2 YD.	8.69	6.50	204
ROY44305	ROYAL LIGHT SILK ORANGE 2 YD.	8.69	6.50	204
ROY44313	ROYAL LIGHT SILK YELLOW 2 YD.	8.69	6.50	204
ROY44401	ROYAL HEAVY SILK WHITE 2 YD.	10.89	8.15	204
ROY44402	ROYAL HEAVY SILK RED 2 YD.	10.89	8.15	204
ROY72001	ROYAL A6M3 ZERO (20 SIZE)	55.95	47.55	62
ROY72002	ROYAL P-51D MUSTANG (20 SIZE)	54.95	46.70	62
ROY72003	ROYAL CESSNA 172 (20 SIZE)	56.95	48.40	62
ROY72006	ROYAL CESSNA 182 JR. (15-23)	59.95	50.95	63
ROY73003	ROYAL CORSAIR F4U-1D (40 SIZE)	74.95	63.95	62
ROY73012	ROYAL HEIN JUNIOR (TONY)	59.95	50.95	63
ROY73016	ROYAL A6M3 ZERO (40-50)	79.95	67.95	62
ROY73018	ROYAL SPITFIRE JUNIOR	54.95	46.95	63
ROY73022	ROYAL PIPER COLT JUNIOR	54.95	46.95	63
ROY73023	ROYAL BLERIOT XI	54.95	46.95	63
ROY74001	ROYAL CESSNA 206	94.95	80.95	63
ROY74002	ROYAL FOCKE WULF 190	89.95	76.95	64
ROY74003	ROYAL CORSAIR F4U-1D (60-80)	94.95	80.95	64
ROY74004	ROYAL PHANTOM F4J	82.95	70.95	64
ROY74005	ROYAL CESSNA 182	89.95	76.95	64
ROY74007	ROYAL B-25 TWIN	99.95	84.95	64
ROY74008	ROYAL P-38 TWIN	109.95	93.45	64
ROY74009	ROYAL SPIRIT OF ST. LOUIS	89.95	76.95	65
ROY74010	ROYAL PITTS SPECIAL	84.95	72.95	65
ROY74011	ROYAL HEIN SENIOR (TONY)	94.95	80.95	65
ROY74013	ROYAL OSCAR (HAYABUSA)	89.95	76.95	65
ROY74014	ROYAL CESSNA 310 Q (TWIN)	99.95	84.95	65
ROY74015	ROYAL A6M5 ZERO (60-80)	94.95	80.95	65
ROY74017	ROYAL SPITFIRE	89.95	76.95	66
ROY74019	ROYAL AQUARIUS	74.95	63.95	66
ROY74021	ROYAL PIPER COLT SENIOR	94.95	80.95	66
ROY74024	ROYAL CESSNA SKYMASTER	99.95	84.95	66
ROY74025	ROYAL F8F BEARCAT	94.95	80.95	66
ROY74026	ROYAL S2 PITTS SPECIAL	89.95	76.95	66
ROY74030	ROYAL STAGGERWING BEECH	89.95	76.95	67
ROY74047	ROYAL DOUGLAS C-47	109.95	93.45	67
ROY74051	ROYAL P-51D MUSTANG	94.95	80.95	67
ROY74068	ROYAL TWIN P-68 VICTOR	89.95	76.95	67
ROY74087	ROYAL JU 87D-5 STUKA	94.95	80.95	67
ROY74109	ROYAL ME-109D	94.95	80.95	62
RTC71100	RTC MODELS WANDERER 72 IN. RTC	54.95	48.95	104
RTC73000	RTC MODELS TRAINER 40 RTC	79.95	71.95	68
S&O86000	S&O QUICK CHARGER	29.95	26.95	185
S&O86100	S&O BATTERY TESTER	24.95	19.95	185
S&O86250	S&O 250 MA BATTERY PACK	16.95	15.25	185
SAN81306	SANWA 80306 SERVO-WATERPROOF	49.95	39.95	142
SAN81307	SANWA 80307 SERVO-HI-TORQUE	49.95	39.95	142
SAN81311	SANWA 80311 SERVO-STANDARD	49.95	39.95	142
SAN81321	SANWA 80321 SERVO-MICRO	29.95	25.45	142
SAN81361	SANWA 80361 SERVO-MINI	49.95	39.95	142
SAN81381	SANWA 80381 SAIL WINCH SERVO	59.95	47.95	142
SAN82161	SANWA 80161 TRAY-MICRO-AILERON	2.25	2.15	142
SAN82162	SANWA 80162 TRAY-MICRO-DUAL	2.95	2.80	142
SAN82163	SANWA 80163 TRAY-MICRO-2X1	2.95	2.80	142
SAN83100	SANWA 80100 SERVO EXT. CABLE	3.95	3.55	142
SAN88521	SANWA 2 CH/WHL/2SERV #8021-DRY	139.95	109.95	142

STOCK NO	DESCRIPTION	RETAIL PRICE	TOWER PRICE	PAGE #
SAN88522	SANWA 2 CH/2ST/2SERV #8020-DRY	99.95	79.95	142
SAN88523	SANWA 2 CH/1ST/2SERV #8022-DRY	139.95	109.95	142
SAN88531	SANWA 3 CH/1ST/2SERV #8031-DRY	159.95	119.95	142
SAN88533	SANWA 3 CH/1ST/3SERV #8033-NIC	229.95	162.95	142
SAN88542	SANWA 4 CH/2ST/4SERV #8040-NIC	299.95	209.95	142
SAN88562	SANWA 6 CH/2ST/4SERV #8060-NIC	369.95	251.95	142
SAN88642	SANWA 4 CH/2ST/4SERV #8044-NIC	279.95	195.95	142
SAN88652	SANWA 5 CH/2ST/4SERV #8054-NIC	299.95	209.95	142
SCO17100	SCOZZI DUCTED FAN TURB AX-1	59.95	49.95	156
SCO17200	SCOZZI DUCTED FAN TUB-AX II	39.95	33.50	156
SEA45202	SEALECTOR-CUSTOM MODEL IRON	22.40	17.75	204
SEM16000	SEMCO BOLTON FT WEBRA 61 203SW	15.95	12.30	224
SEM16030	SEMCO BOLTON EX WEBRA 61 203EW	15.95	12.30	224
SEM16120	SEMCO MUFFLER #201-FS	13.95	10.75	224
SEM16121	SEMCO MUFFLER #202-FS	13.95	10.75	224
SEM16122	SEMCO MUFFLER #203-FS	13.95	10.75	224
SEM16161	SEMCO MUFFLER #201-ES	13.95	10.75	224
SEM16162	SEMCO MUFFLER #202-ES	13.95	10.75	224
SEM16163	SEMCO MUFFLER #203-ES	13.95	10.75	224
SEM16181	SEMCO MUFFLER #201-BCT	13.95	10.75	224
SEM16182	SEMCO MUFFLER #202-BCT	13.95	10.75	224
SEM16183	SEMCO MUFFLER #203-BCT	13.95	10.75	224
SEM16185	SEMCO MUFFLER #202-FA	13.95	10.75	224
SEM16186	SEMCO MUFFLER #203-FA	13.95	10.75	224
SEM16188	SEMCO MUFFLER #203T TUNED PIPE	13.95	10.75	224
SEM16191	SEMCO MUFFLER FOR PITTS #203P	13.95	10.75	224
SEM16192	SEMCO MUFFLER PITTS JR #202PJ	13.95	10.75	224
SEM16193	SEMCO MUFFLER PITTS JR #203PJ	13.95	10.75	224
SEM16201	SEMCO ADAPTOR #1-S ENYA 15-19	2.98	2.50	224
SEM16206	SEMCO ADAPTOR #6-S VECO 19	2.98	2.50	224
SEM16208	SEMCO ADAPTOR #8-S FOX 19-25	2.98	2.50	224
SEM16301	SEMCO ADAPTOR #1-M ENYA 29-35	2.98	2.50	224
SEM16302	SEMCO ADAPTOR #2-M OS 30-35-40	2.98	2.50	224
SEM16303	SEMCO ADAPTOR #3-M ST 29-35	2.98	2.50	224
SEM16304	SEMCO ADAPTOR #4-M K&B 35-40	2.98	2.50	224
SEM16305	SEMCO ADAPTOR #5-M FOX 29-36	2.98	2.50	224
SEM16307	SEMCO ADAPTOR #7-M OLD K&B 35	2.98	2.50	224
SEM16309	SEMCO ADAPTOR #9-M WEBRA 40	2.98	2.50	224
SEM16316	SEMCO ADAPTOR #16-M OS 40 SCHN	2.98	2.50	224
SEM16317	SEMCO ADAPTOR #17-M FOX 40 SHN	2.98	2.50	224
SEM16318	SEMCO ADAPTOR #18-M WEB 40 SPD	2.98	2.50	224
SEM16401	SEMCO ADAPTOR #1-L ENYA 40-45	2.98	2.50	224
SEM16402	SEMCO ADAPTOR #2-L ENYA 60 III	2.98	2.50	224
SEM16404	SEMCO ADAPTOR #4-L OS 60	2.98	2.50	224
SEM16405	SEMCO ADAPTOR #5-L ST 46	2.98	2.50	224
SEM16406	SEMCO ADAPTOR #6-L ST 51-56-60	2.98	2.50	224
SEM16409	SEMCO ADAPTOR #9-L FOX 78	2.98	2.50	224
SEM16413	SEMCO ADAPTOR #13-L WEBRA 61	2.98	2.50	224
SEM16417	SEMCO ADAPTOR #17-L ST G60-71	2.98	2.50	224
SEM16419	SEMCO ADAPTOR #19-L FOX 60	2.98	2.50	224
SEM16421	SEMCO ADAPTOR #21-L WEB 61 SNL	2.98	2.50	224
SEM16426	SEMCO ADAPTOR #26-L FOX 45 SHN	2.98	2.50	224
SEM16427	SEMCO ADAPTOR #27-L OS 60 SCHN	2.98	2.50	224
SEM16428	SEMCO ADAPTOR #28-L KRAFT 61	2.98	2.50	224
SEM16485	SEMCO TUNED PIPE ADPTOR 202TPA	8.95	7.60	224
SEM16486	SEMCO TUNED PIPE ADPTOR 203TPA	8.95	7.60	224
SEM16494	SEMCO TUNED PIPE COUPLER TPC	4.98	4.20	224
SEM16502	SEMCO REPLACEMENT STRAP #202RS	1.89	1.80	224
SEM16503	SEMCO REPLACEMENT STRAP #203RS	1.98	1.90	224
SEM16510	SEMCO EXHAUST PLUGS #310P	.98	.95	224
SEM16511	SEMCO EXHAUST PLUGS #311P	.98	.95	224
SEM16520	SEMCO 401-1EXT 1 IN MUFF EXTN	4.25	3.85	224
SEM16521	SEMCO 401EXT 1/2 IN MUFF EXTN	3.95	3.55	224
SEM16522	SEMCO 402EXT 1/2 IN MUFF EXTN	3.95	3.55	224
SEM16523	SEMCO 402-1EXT 1 IN MUFF EXTN	4.25	3.85	224
SEM16524	SEMCO 403EXT 1/2 IN MUFF EXTN	3.95	3.55	224
SEM16525	SEMCO 403-1EXT 1 IN MUFF EXTN	4.25	3.85	224
SEM16531	SEMCO EXHAUST EXTENSION #201EM	4.50	4.25	224
SEM16532	SEMCO EXHAUST EXTENSION #202EM	4.50	4.25	224
SEM16533	SEMCO EXHAUST EXTENSION #203EM	4.50	4.25	224
SEM83012	SEMCO TRANSMITTER STRAP #TS-12	2.69	2.45	236
SIG72003	SIG #RC-3 PIPER J-3 CUB	37.95	32.95	69
SIG72026	SIG #RC-26 CLIPPED WING CUB	37.95	32.95	69
SIG72031	SIG #RC-31 KADET TRAINER	34.95	29.95	69
SIG72043	SIG #RC-43 COLT	20.95	18.25	69
SIG73030	SIG #RC-30 CITABRIA	47.50	41.35	69
SIG73032	SIG #RC-32 KOMMANDER	39.95	34.75	69
SIG73035	SIG #RC-35 KOUGAR	44.95	38.95	69
SIG73038	SIG #RC-38 SMITH MINIPLANE	49.95	42.45	69
SIG74001	SIG #KBRC1 SUPER CHIPMUNK	59.95	51.95	69
SIG74004	SIG #KBRC-4 CESSNA 150	69.95	59.95	69
SIG74027	SIG #RC-27 RYAN STA	73.50	63.95	69
SIG74029	SIG #RC-29 KOMET (BALSA SKIN)	47.25	40.95	69
SIG74033	SIG #RC-33 LIBERTY SPORT	64.95	56.50	69
SIG74034	SIG #RC-34 SKYBOLT	62.50	53.95	69
SIM69025	SIMMONS 1/4'' CAMEL HAIR BRUSH	.70	.65	246
SIM69050	SIMMONS 1/2'' CAMEL HAIR BRUSH	.95	.90	246
SIM69075	SIMMONS 3/4'' CAMEL HAIR BRUSH	1.55	1.45	246
SIM69100	SIMMONS 1'' CAMEL HAIR BRUSH	2.10	2.00	246
SIM69825	SIMMONS ARTIST BRUSH SET	2.25	2.00	246
SIM69855	SIMMONS ALL PURPOSE BRUSH SET	1.55	1.45	246
SKY73102	SKYGLAS PHOENIX 5	49.95	35.95	70
SKY74001	SKYGLAS VERTIGO II	65.00	45.50	70
SKY74002	SKYGLAS P-47N THUNDERBOLT	65.00	45.50	70
SKY74003	SKYGLAS PHOENIX 6	65.00	45.50	70
SKY74004	SKYGLAS FSF BEARCAT	65.00	45.50	70

STOCK NO	DESCRIPTION	RETAIL PRICE	TOWER PRICE	PAGE #
SLM16001	SLM STD. MUFF 1001 ALL 60-80	12.95	11.65	225
SLM16002	SLM STD. MUFF 1002 ALL 29-45	12.95	11.65	225
SLM16003	SLM SCALE 1 MUF 1003 ALL 60-80	13.95	12.55	225
SLM16004	SLM SCALE 1 MUF 1004 ALL 29-45	13.95	12.55	225
SLM16005	SLM SCALE 2 MUF 1005 ALL 60-80	13.95	12.55	225
SLM16006	SLM SCALE 2 MUF 1006 ALL 29-45	13.95	12.55	225
SLM16100	SLM STD MUFF 702 HP 40	8.95	8.10	225
SLM16110	SLM STD MUFF 701 HP 60	9.95	8.95	225
SLM16111	SLM COMP MUFF 703 HP 60	12.95	11.65	225
SLM16200	SLM STD MUFF 404 WEB 40 SCHNRL	8.95	8.10	225
SLM16205	SLM STD MUFF 402 WEB 40 BLKHD	8.95	8.10	225
SLM16210	SLM STD MUFF 301 WEB/K&B 61	9.95	8.95	225
SLM16211	SLM COMP MUFF 105 WEB/K&B 61	12.95	11.65	225
SLM16220	SLM STD MUFF 403 WEB 61 SCHNRL	9.95	8.95	225
SLM16300	SLM STD MUFF 101 ST 60 BLUEHD	9.95	8.95	225
SLM16301	SLM COMP MUFF 104 ST 60 BLUEHD	12.95	11.65	225
SLM16305	SLM STD MUFF 103 ST 15,23	7.95	7.25	225
SLM16310	SLM STD MUFF 102 ST 60SR,46	9.95	8.95	225
SLM16311	SLM COMP MUFF 105 ST 60SR,46	12.95	11.65	225
SLM16390	SLM STD MUFF 303 VECO 19	7.95	7.25	225
SLM16400	SLM STD MUFF 302 K&B 35,40	8.95	8.10	225
SLM16410	SLM STD MUFF 301 K&B/WEB 61	9.95	8.95	225
SLM16411	SLM COMP MUFF 105 K&B/WEB 61	12.95	11.65	225
SLM16495	SLM STD MUFF 204 OS MAX 15-25	7.95	7.25	225
SLM16500	SLM STD MUFF 202 OS MAX 30-40	8.95	8.10	225
SLM16503	SLM STD MUFF 203 OS MAX 40 FSR	8.95	8.10	225
SLM16510	SLM STD MUFF 201 OS MAX 60-80	9.95	8.95	225
SLM16580	SLM STD MUFF 503 ENYA 15-19	7.95	7.25	225
SLM16600	SLM STD MUFF 502 ENYA 29-45	8.95	8.10	225
SLM16610	SLM STD MUFF 501 ENYA 60	9.95	8.95	225
SLM16690	SLM STD MUFF 804 FOX 19-35	8.95	8.10	225
SLM16700	SLM STD MUFF 803 FOX 40&45 SCH	8.95	8.10	225
SLM16710	SLM STD MUFF 802 FOX 60	9.95	8.95	225
SLM16715	SLM STD MUFF 801 FOX 78	9.95	8.95	225
SLM16770	SLM STD MUFF 601 KRAFT 61 SCHN	9.95	8.95	225
SLM16771	SLM COMP MUFF 602 KRAFT 61 SCH	12.95	11.65	225
SMI74000	BOB SMITH PATRICIA (PATTERN)	109.95	93.95	68
SOL46001	SOLARFILM #6001 BRIGHT RED	7.98	4.95	208
SOL46002	SOLARFILM #6002 DARK RED	7.98	4.95	208
SOL46003	SOLARFILM #6003 ORANGE	7.98	4.95	208
SOL46004	SOLARFILM #6004 YELLOW	7.98	4.95	208
SOL46005	SOLARFILM #6005 WHITE	7.98	4.95	208
SOL46006	SOLARFILM #6006 SILVER	7.98	4.95	208
SOL46007	SOLARFILM #6007 TROPIC BLUE	7.98	4.95	208
SOL46008	SOLARFILM #6008 MIDNIGHT BLUE	7.98	4.95	208
SOL46009	SOLARFILM #6009 BLACK	7.98	4.95	208
SOL46601	SOLARFILM #6601 TRANS RED	9.25	6.75	208
SOL46603	SOLARFILM #6603 TRANS ORANGE	9.25	6.75	208
SOL46604	SOLARFILM #6604 TRANS YELLOW	9.25	6.75	208
SOL46608	SOLARFILM #6608 TRANS BLUE	9.25	6.75	208
SOL47801	SOLARFILM #7801 METALLIC RED	10.50	7.55	208
SOL47810	SOLARFILM #7810 METALLIC GREEN	10.50	7.55	208
SOL47811	SOLARFILM #7811 METALLIC GOLD	10.50	7.55	208
SOL47999	SOLARFILM SOLVENT	.69	.65	208
SOR71001	SOARCRAFT DIAMANT	89.50	75.95	105
SOR71003	SOARCRAFT MAGNUM 12	129.95	109.95	105
SOR71011	SOARCRAFT CENTURION II	59.50	50.55	105
SOR71604	SOARCRAFT GLASFLUGEL 604 KIT	99.50	84.65	105
SOR74004	SOARCRAFT SKYBOLT BIPE	99.50	84.65	68
SOR74005	SOARCRAFT SPINKS AKROMASTER	84.95	72.20	68
SOS20000	SONIC-SYSTEMS TM1 DISC BRAKE	15.95	12.75	263
SOS22001	SONIC-SYSTEMS NOSE GR. RETRACT	17.95	14.35	254
SOS22002	SONIC SYSTEMS 2 GEAR RETRACTS	17.95	14.35	254
SOS22304	SONIC-SYSTEM GR-3A W/CHARGER	55.90	44.70	254
SOS22305	SONIC-SYSTEM GR-3X WO/CHARGER	44.90	35.95	254
SOS22400	SONIC SYSTEMS SUPER CHARGER II	11.95	9.50	254
SOS22401	SONIC SYSTEMS QUICK-DISCONNECT	3.95	3.55	254
SOS22402	SONIC SYSTEMS MONITAIRE	6.95	6.25	254
SOU71001	SOUTHWESTERN TOP CAT SAILPLANE	28.95	22.25	106
SOU72002	SOUTHWESTERN HONKER 1/2A	18.95	14.70	71
SOU72003	SOUTHWESTERN HONKER BIPE	34.95	26.75	71
SOU72005	SOUTHWESTERN LI'L GYPSY	20.95	17.25	71
SOU72006	SOUTHWESTERN GYPSY LADY	35.95	27.50	71
SPA74000	SPAN AERO PIPER J-3 8 FT.	124.95	95.95	72
SPI72200	SPICKLER QUICKIE 200	19.95	16.95	69
SPI73500	SPICKLER QUICKIE 500 KIT	43.95	34.95	69
SPL23101	SU-PR-LINE M-ROD MASTEROD	1.69	1.60	174
SPL23102	SU-PR-LINE XF-ROD MASTEROD-XF	1.69	1.60	174
SPL23201	SU-PR-LINE 30 IN NYROD	1.59	1.50	174
SPL23301	SU-PR-LINE P-ROD PRODOD	1.98	1.85	174
SPL23401	SU-PR-LINE S-ROD SU-PR-ROD	1.69	1.60	174
SPL25901	SU-PR-LINE PR PRORODAPTORS	.59	.55	174
SPL25903	SU-PR-LINE SN STUD&NUTS 256	.49	.45	174
SPL25904	SU-PR-LINE NVS SU-PR-KLEVIS	.79	.75	174
SPL25905	SU-PR-LINE KPR SU-PR-KEEPRS	.69	.65	174
SPL25906	SU-PR-LINE NY NYRODAPTORS	.59	.55	174
SPL25907	SU-PR-LINE NSN NYRODSTUDNUT	.49	.45	174
SPL25909	SU-PR-LINE BC COUPLERS 256	.59	.55	174
SRC12000	SOUTHERN RC STARTER BATT. PACK	39.95	31.95	
SRC12100	SOUTHERN RC BATT. PACK CHARGER	8.95	7.60	
SRC20001	SOUTHERN RC MR. MUSCLE	14.50	11.90	199
SRC31101	SOUTHERN RC SORGHUN 7 OZ.	2.95	2.75	181
SRC32001	SOUTHERN RC MIX-A-MATIC 14 OZ.	8.50	7.25	181
SRC39201	SOUTHERN RC FLEX-ALL	1.95	1.75	246
SRC43001	SOUTHERN RC SKYLOFT 3 SQ. YD.	2.80	2.50	204
SRC54401	SOUTHERN RC SIX-SHOOTER PUMP	10.95	8.95	229

STOCK NO	DESCRIPTION	RETAIL PRICE	TOWER PRICE	PAGE #
SRC55501	SOUTHERN RC LIFELINE 4 FT.	2.50	2.25	229
SRC73009	SOUTHERN RC ALLEY KAT	48.50	38.80	73
SRC74001	SOUTHERN RC TIGERTAIL 3-GLASS	89.95	71.95	73
SRC74008	SOUTHERN RC COMPENSATOR-GLASS	79.95	63.95	73
SRC74011	SOUTHERN RC BOOTLEGGER (GLASS)	89.95	71.95	73
SRC74109	SOUTHERN RC ATLAS (GLASS)	79.95	63.95	73
SSS90000	STA-BRITE SILVER SOLDER	3.25	3.10	201
STA72000	STAFFORD B-24D LIBERATOR	189.95	149.95	74
STA72011	STAFFORD BUCCANEER FOAM WING	39.95	33.95	75
STA72015	STAFFORD TOMKITTY MK-15 BALSA	37.50	31.85	74
STA73040	STAFFORD TOMKITTY MK-40 FOAM	54.95	46.70	74
STA73100	STAFFORD TWIN COMANCHE (BALSA)	139.95	118.95	75
STA74004	STAFFORD P-39 AIRACOBRA (FOAM)	59.95	50.95	74
STA74005	STAFFORD COMANCHE (BALSA WING)	69.95	59.45	75
STA74006	STAFFORD ACRO SPT (FOAM WING)	69.95	59.45	75
STA74007	STAFFORD ACRO SPT (BALSA WING)	64.95	55.20	75
STA74008	STAFFORD CHIPMUNK (FOAM)	59.95	50.95	75
STA74009	STAFFORD AIRCOUPE (BALSA)	69.95	59.45	74
STA74010	STAFFORD WEEKENDER (FOAM)	54.95	46.70	74
STA74011	STAFFORD SPERRY MESSNGER-BALSA	54.95	46.70	75
STA74012	STAFFORD P-51 BIG 600 (FOAM)	59.95	50.95	74
STE70026	STERLING B-26 PUDDLE JUMPER	16.95	12.75	116
STE70027	STERLING B-27 PUD. JUMPER MKII	39.95	29.95	116
STE72001	STERLING FS-1 PIPER TRI-PACER	39.95	29.95	76
STE72002	STERLING FS-2 CESSNA 180	24.95	19.95	76
STE72003	STERLING FS-3 MAMBO	21.95	17.55	76
STE72005	STERLING FS-5 FAIRCHILD PT-19	28.95	21.70	76
STE72007	STERLING FS-7 WIZARD	39.95	29.95	76
STE72018	STERLING FS-18 LIL ROUGHNECK	9.95	8.45	76
STE72022	STERLING FS-22 S.E.5A	47.95	35.95	76
STE72029	STERLING FS-29 FLEDGLING	41.95	31.45	76
STE72031	STERLING FS-31 CITABRIA	42.95	32.20	76
STE72035	STERLING FS-35 MINI-FLEDGLING	21.95	17.55	76
STE72036	STERLING FS-36 1/2 A CORSAIR	29.95	23.95	77
STE73025	STERLING FS-25 LANCER	43.95	32.95	76
STE73027	STERLING FS-27 RIMFIRE	46.95	35.20	76
STE74008	STERLING FS-8 PIPER CRUISER	54.95	39.55	76
STE74020	STERLING FS-20 STEARMAN PT-17	89.95	62.95	76
STE74021	STERLING FS-21 FOKKER D-VII	87.95	61.55	76
STE74032	STERLING FS-32 GAZARIATOR	63.95	45.95	76
STE74033	STERLING FS-33 STINSON RELIANT	64.95	46.75	76
STE74034	STERLING FS-34 WACO	72.95	52.50	76
STG00142	SUPERTIGRE X 40 SPEED ENGINE	76.95	61.55	157
STG01023	SUPERTIGRE G 20/23 RC	49.95	39.95	157
STG01035	SUPERTIGRE .35 RC ENGINE	44.95	35.95	157
STG01060	SUPERTIGRE ST .60 RC BB ENGINE	64.95	51.95	157
STG01146	SUPERTIGRE G 21/46 RC ENGINE	55.95	44.75	157
STG01160	SUPERTIGRE G .60 RC BLUEHEAD	84.95	67.95	157
STG01171	SUPERTIGRE G .71 RC	99.00	79.20	157
STG01260	SUPERTIGRE G .60 FI ABC RC	92.95	74.35	157
STG01360	SUPERTIGRE G .60 ABC RC W/PUMP	112.95	89.95	157
STG05046	SUPERTIGRE X .46 RC SCHNEURLE	Price unavailable at press time		157
STG05060	SUPERTIGRE X .60 RC SCHNEURLE	125.00	99.95	157
STG05160	SUPERTIGRE X .60 RC RE SCHNRLE	125.00	99.95	157
STG16023	SUPERTIGRE MUFFLER FOR 15-23	12.95	11.95	222
STG16035	SUPERTIGRE MUFFLER FOR 35	12.95	11.95	222
STG16060	SUPERTIGRE MUFFLER FOR G60-71	12.95	11.95	222
STG16460	SUPERTIGRE MUFFLER FOR .46 RC	12.95	11.95	222
STG16600	SUPERTIGRE MUFFLER FOR ST 60BB	12.95	11.95	222
STR12100	SONICTRONICS #100 STARTER	38.50	28.95	213
STR12101	SONICTRONICS #101 STARTER	38.50	28.95	213
STR12200	SONICTRONICS #200 ADAPTOR STD.	.98	.85	213
STR12201	SONICTRONICS #201 ADAPTOR	.98	.85	213
STR12203	SONICTRONICS #203 ADAPTOR HELI	4.95	4.45	213
STR12204	SONICTRONICS #204 BELT 300 MM	4.95	4.45	213
STR12205	SONICTRONICS #205 BELT 500 MM	4.95	4.45	213
STR12206	SONICTRONICS #206 ALUMINUM CUP	4.95	4.45	213
STR15300	SONICTRONICS RC LONG PLUG	1.29	1.25	217
STR15305	SONICTRONICS RC SHORT PLUG	1.29	1.25	217
STR20230	SONICTRONICS #230 SEATING 1/16	.75	.70	175
STR20231	SONICTRONICS #231 SEATING 3/8	.85	.80	175
STR20232	SONICTRONICS #232 SEATING 1/4	.80	.75	175
STR20235	SONICTRONICS #235 MOUNTING 1/16	.90	.85	175
STR20236	SONICTRONICS #236 MOUNTING 1/8	.95	.90	175
STR20238	SONICTRONICS #238 SHRINK TAPE	1.45	1.35	175
STR20240	SONICTRONICS #240 PROTEC-A-PAC	.99	.95	175
STR20255	SONICTRONICS #255 TAPE 1 1/2	.95	.90	175
STR20256	SONICTRONICS #256 TAPE 3 IN.	1.49	1.40	175
STR20257	SONICTRONICS #257 TAPE 6 IN.	1.99	1.90	175
STR20260	SONICTRONICS #260 PLUG CADDIE	1.19	1.10	175
STR20270	SONICTRONICS #270 T PINS LARGE	.75	.70	175
STR20271	SONICTRONICS #271 T PINS SMALL	.75	.70	175
STR20281	SONICTRONICS #281 72/75 FLAGS	.99	.95	175
STR28245	SONICTRONICS #245 GROMMETS SM.	.60	.55	175
STR28246	SONICTRONICS #246 GROMMETS MED	.60	.55	175
STR54160	STR #160 SIDEWINDER HAND PUMP	8.95	7.60	267
STR54249	SONICTRNCS #1250 12V FUEL PUMP	14.95	11.95	229
STR54250	SONICTRONICS #250 FUEL PUMP	14.95	11.95	229
STR54251	SONICTRONICS #250R RESISTOR	1.95	1.75	229
STR54252	SONICTRONICS #252 BIG SHOT 8OZ	3.29	2.95	229
STR54253	SONICTRONICS #253 KLEEN-FIL	1.85	1.65	229
STR55220	SONICTRONICS #220 SURGICAL SM.	.65	.60	229
STR55221	SONICTRONICS #221 SURGICAL LG.	.75	.70	229
STR55222	SONICTRONICS #222 SURGICAL SUP	.85	.80	229
STR55225	SONICTRONICS #225 SILICONE SM.	.80	.75	229
STR55226	SONICTRONICS #226 SILICONE LG.	.90	.85	229

STOCK NO	DESCRIPTION	RETAIL PRICE	TOWER PRICE	PAGE #
STR55251	SONICTRONICS #251 FUELLINE KIT	1.79	1.60	229
STR55326	SONICTRONICS #226R 30 ROLL LG	11.50	10.25	229
STR90000	SONICTRONICS POWER CENTER	29.95	23.95	211
SUL12200	SULLIVAN ELECTRIC STARTER #HT	36.95	26.95	213
SUL12201	SULLIVAN DLX. STARTER #HTD	39.95	28.95	213
SUL12204	SULLIVAN RUB ADAPT SPINR #RASP	.79	.75	213
SUL12205	SULLIVAN RUBBER ADAPT CAR #RAC	1.25	1.20	213
SUL12206	SULLIVAN ALUM DRIVE CONE #4-1	4.95	4.50	213
SUL12208	SULLIVAN 12V BATT CHARGER #BC1	9.95	8.75	186
SUL12209	SULLIVAN 12V GEL-CELL 4.5AH	29.50	24.95	186
SUL18211	SULLIVAN ADAPTOR 1/4-28 #PL28	1.10	1.05	257
SUL18212	SULLIVAN ADAPTOR 7 MM. #PL7	1.10	1.05	257
SUL18213	SULLIVAN ADAPTOR 6 MM. #PL6	1.10	1.05	257
SUL18214	SULLIVAN ADAPTOR 5/16-24 #PL24	1.10	1.05	257
SUL18311	SULLIVAN SPINNER 1 1/2 RED	.80	.75	257
SUL18312	SULLIVAN SPINNER 1 1/2 BLACK	.80	.75	257
SUL18313	SULLIVAN SPINNER 1 1/2 WHITE	.80	.75	257
SUL18321	SULLIVAN SPINNER 1 3/4 RED	.80	.75	257
SUL18322	SULLIVAN SPINNER 1 3/4 BLACK	.80	.75	257
SUL18323	SULLIVAN SPINNER 1 3/4 WHITE	.80	.75	257
SUL18331	SULLIVAN SPINNER 2 RED	.80	.75	257
SUL18332	SULLIVAN SPINNER 2 BLACK	.80	.75	257
SUL18333	SULLIVAN SPINNER 2 WHITE	.80	.75	257
SUL18341	SULLIVAN SPINNER 2 1/4 RED	.80	.75	257
SUL18342	SULLIVAN SPINNER 2 1/4 BLACK	.80	.75	257
SUL18343	SULLIVAN SPINNER 2 1/4 WHITE	.80	.75	257
SUL18351	SULLIVAN SPINNER 2 1/2 RED	.80	.75	257
SUL18352	SULLIVAN SPINNER 2 1/2 BLACK	.80	.75	257
SUL18353	SULLIVAN SPINNER 2 1/2 WHITE	.80	.75	257
SUL18361	SULLIVAN SPINNER 2 3/4 RED	.80	.75	257
SUL18362	SULLIVAN SPINNER 2 3/4 BLACK	.80	.75	257
SUL18363	SULLIVAN SPINNER 2 3/4 WHITE	.80	.75	257
SUL23036	SULLIVAN GOLD-N-ROD(FLEX)GRF36	1.60	1.50	176
SUL23048	SULLIVAN GOLD-N-ROD(FLEX)GRF48	1.70	1.60	176
SUL52100	SULLIVAN CT-1 CRAP TRAP FILTER	1.00	.95	229
SUL53001	SULLIVAN SS-2 TANK	1.75	1.65	230
SUL53004	SULLIVAN SS-4 TANK	1.95	1.80	230
SUL53006	SULLIVAN SS-6 TANK	2.20	2.10	230
SUL53008	SULLIVAN SS-8 TANK	2.20	2.10	230
SUL53010	SULLIVAN SS-10 TANK	2.35	2.20	230
SUL53012	SULLIVAN SS-12 TANK	2.35	2.20	230
SUL53014	SULLIVAN SS-14 TANK	2.50	2.35	230
SUL53016	SULLIVAN SS-16 TANK	2.50	2.35	230
SUL53106	SULLIVAN SO-6 TANK	2.20	2.10	230
SUL53108	SULLIVAN SO-8 TANK	2.20	2.10	230
SUL53110	SULLIVAN SO-10 TANK	2.35	2.20	230
SUL53112	SULLIVAN SO-12 TANK	2.35	2.20	230
SUL53204	SULLIVAN CR-4 TANK	1.90	1.75	230
SUL53206	SULLIVAN CR-6 TANK	2.15	2.00	230
SUL53208	SULLIVAN CR-8 TANK	2.15	2.00	230
SUL53210	SULLIVAN CR-10 TANK	2.40	2.25	230
SUL53212	SULLIVAN CR-12 TANK	2.40	2.25	230
SUL53304	SULLIVAN CSS-4 TANK	2.15	2.00	230
SUL53306	SULLIVAN CSS-6 TANK	2.40	2.25	230
SUL53308	SULLIVAN CSS-8 TANK	2.40	2.25	230
SUL53310	SULLIVAN CSS-10 TANK	2.55	2.40	230
SUL53312	SULLIVAN CSS-12 TANK	2.55	2.40	230
SUL53404	SULLIVAN CRST-4 TANK	2.15	2.00	230
SUL53406	SULLIVAN CRST-6 TANK	2.40	2.25	230
SUL53408	SULLIVAN CRST-8 TANK	2.40	2.25	230
SUL53410	SULLIVAN CRST-10 TANK	2.55	2.40	230
SUL53412	SULLIVAN CRST-12 TANK	2.55	2.40	230
SUL53504	SULLIVAN RST-4 TANK	1.95	1.80	230
SUL53506	SULLIVAN RST-6 TANK	2.20	2.10	230
SUL53508	SULLIVAN RST-8 TANK	2.20	2.10	230
SUL53510	SULLIVAN RST-10 TANK	2.35	2.20	230
SUL53512	SULLIVAN RST-12 TANK	2.35	2.20	230
SUL53601	SULLIVAN R-1 TANK	1.65	1.55	230
SUL53602	SULLIVAN R-2 TANK	1.75	1.65	230
SUL53604	SULLIVAN R-4 TANK	1.75	1.65	230
SUL53606	SULLIVAN R-6 TANK	1.95	1.80	230
SUL53608	SULLIVAN R-8 TANK	1.95	1.85	230
SUL53610	SULLIVAN R-10 TANK	2.20	2.10	230
SUL53612	SULLIVAN R-12 TANK	2.20	2.10	230
SUL53616	SULLIVAN R-16 TANK	2.20	2.10	230
SUR71002	SUREFLITE 108 EYE SOAR GLIDER	18.95	15.15	106
SUR71117	SUREFLITE 117 SUPER EYE SOAR	49.95	37.50	106
SUR72106	SUREFLITE 106 BALSA CUB J-3	24.95	18.75	79
SUR72107	SUREFLITE 107 CHAMPION	27.95	22.50	79
SUR72108	SUREFLITE 109 SKYLANE 182	37.95	28.50	79
SUR72109	SUREFLITE 111 BABY BIRDY	19.95	15.95	78
SUR72114	SUREFLITE 116 ALL FOAM J3 CUB	37.95	28.50	78
SUR72119	SUREFLITE 119 A-7 CORSAIR-FOAM	29.95	22.50	78
SUR72120	SUREFLITE 120 CUTLASS	24.95	18.75	78
SUR72123	SUREFLITE 123 DGA-3 PETE-FOAM	24.95	18.75	80
SUR72124	SUREFLITE 124 1/2A J-3 (FOAM)	24.95	18.75	78
SUR72125	SUREFLITE 1/2A J-3 ARF W/049	49.95	37.50	78
SUR73118	SUREFLITE 118 BABY BIRDIE ARF	49.95	37.50	79
SUR73122	SUREFLITE 122 SPITFIRE-FOAM	37.95	28.50	80
SUR77000	SUREFLITE 204 FLOATS (09-35)	11.95	9.95	236
SUR77010	SUREFLITE 207 FLOATS (29-60)	14.95	11.95	236
TAR11000	TARNO AERO 1/2 A RC TARNO-CARB	12.95	10.95	217
TAT16101	TATONE #101 PEACE PIPE 09-19	8.45	7.60	225
TAT16102	TATONE #102 PEACE PIPE 29-40	9.65	8.70	225
TAT16103	TATONE #103 PEACE PIPE 45-80	10.85	9.75	225
TAT16201	TATONE #101L PEACE PIPE 09-19	8.80	7.90	225

PRICE LISTING SECTION

STOCK NO	DESCRIPTION	RETAIL PRICE	TOWER PRICE	PAGE #
TAT16202	TATONE #102L PEACE PIPE 29-40	10.25	9.20	225
TAT16203	TATONE #103L PEACE PIPE 45-80	11.05	9.95	225
TAT16401	TATONE INVERTED MANIFOLD #EM-S	10.65	9.60	225
TAT16402	TATONE INVERTED MAINFOLD EM-SS	10.65	9.60	225
TAT18014	TATONE #14 AMA PROP NUT-1/4 IN	2.05	1.95	236
TAT19095	TATONE #95 GLOW PLUG STARTER	6.75	6.10	186
TAT20001	TATONE #1 SHUT OFF TIMER	14.95	12.70	211
TAT20008	TATONE SCALE INSTRUMENTS 1/4	3.25	3.10	260
TAT20009	TATONE SCALE INSTRUMENTS 5/16	3.25	3.10	260
TAT20010	TATONE SCALE INSTRUMENTS 3/8	3.25	3.10	260
TAT20011	TATONE SCALE INSTRUMENTS 7/16	3.95	3.75	260
TAT20012	TATONE SCALE INSTRUMENTS 1/2	3.95	3.75	260
TAT20033	TATONE #33.5 .049 TANK MOUNT	7.95	7.15	219
TAT20051	TATONE #51 CHICKEN STICK	1.45	1.40	217
TAT20080	TATONE #80 ENGINE TEST STAND	9.60	8.15	217
TAT20096	TATONE #96 BATTERY CHARGER	6.95	6.25	186
TIT31008	TITEBOND ALIPHATIC RESIN 8 OZ.	1.79	1.70	182
TIT31016	TITEBOND ALIPHATIC RESIN 16 OZ	3.00	2.85	182
TOM33003	TOMCO 3 IN.(4) CLAMPS MODEL #3	2.29	2.25	201
TOM33006	TOMCO 6 IN.(2) CLAMPS MODEL #6	1.89	1.85	201
TOP17345	T.F. PROP SUPER-M 1 ONLY 9X6	1.05	1.00	249
TOP17355	T.F. PROP SUPER-M 1 ONLY 10X6	1.15	1.10	249
TOP17365	T.F. PROP SUPER-M 1 ONLY 11X6	1.30	1.25	249
TOP17366	T.F. PROP SUPER-M 1 ONLY 11X7	1.30	1.25	249
TOP17368	T.F. PROP SUPER-M 1 ONLY 11X8	1.30	1.25	249
TOP17375	T.F. PROP SUPER-M 1 ONLY 12X6	1.45	1.40	249
TOP17395	T.F. PROP SUPER-M 1 ONLY 14X6	1.80	1.75	249
TOP17400	T.F. PROP SUPER-M 1 ONLY 16X4	5.95	5.05	249
TOP17402	T.F. PROP SUPER-M 1 ONLY 16X6	5.95	5.05	249
TOP17404	T.F. PROP SUPER-M 1 ONLY 18X6	6.95	5.90	249
TOP17406	T.F. PROP SUPER-M 1 ONLY 18X8	6.95	5.90	249
TOP17408	T.F. PROP SUPER-M 1 ONLY 18X10	6.95	5.90	249
TOP17410	T.F. PROP SUPER-M 1 ONLY-20X6	7.95	6.75	249
TOP17412	T.F. PROP SUPER-M 1 ONLY-20X8	7.95	6.75	249
TOP17414	T.F. PROP SUPER-M 1 ONLY-20X10	7.95	6.75	249
TOP17445	T.F. PROPS SUPER-M DOZEN 9X6	12.60	10.10	249
TOP17455	T.F. PROPS SUPER-M DOZEN 10X6	13.80	11.00	249
TOP17465	T.F. PROPS SUPER-M DOZEN 11X6	15.60	12.50	249
TOP17466	T.F. PROPS SUPER-M DOZEN 11X7	15.60	12.50	249
TOP17468	T.F. PROPS SUPER-M DOZEN 11X8	15.60	12.50	249
TOP17475	T.F. PROPS SUPER-M DOZEN 12X6	17.40	13.90	249
TOP17495	T.F. PROPS SUPER-M DOZEN 14X6	21.60	17.25	249
TOP17501	T.F. PROP NYLON 1 ONLY 5-1/4X3	.40	.35	249
TOP17503	T.F. PROP NYLON 1 ONLY 5-1/4X4	.40	.35	249
TOP17511	T.F. PROP NYLON 1 ONLY 6X3	.45	.40	249
TOP17513	T.F. PROP NYLON 1 ONLY 6X4	.45	.40	249
TOP17523	T.F. PROP NYLON 1 ONLY 7X4	.65	.60	249
TOP17533	T.F. PROP NYLON 1 ONLY 8X4	.80	.75	249
TOP17535	T.F. PROP NYLON 1 ONLY 8X6	.80	.75	249
TOP17543	T.F. PROP NYLON 1 ONLY 9X4	1.10	1.05	249
TOP17545	T.F. PROP NYLON 1 ONLY 9X6	1.10	1.05	249
TOP17546	T.F. PROP NYLON 1 ONLY 9X7	1.10	1.05	249
TOP17552	T.F. PROP NYLON 1 ONLY 10X3.5	1.20	1.15	249
TOP17555	T.F. PROP NYLON 1 ONLY 10X6	1.20	1.15	249
TOP17565	T.F. PROP NYLON 1 ONLY 11X6	1.35	1.30	249
TOP17566	T.F. PROP NYLON 1 ONLY 11X7	1.35	1.30	249
TOP17568	T.F. PROP NYLON 1 ONLY 11X8	1.35	1.30	249
TOP17575	T.F. PROP NYLON 1 ONLY 12X6	1.60	1.55	249
TOP17645	T.F. PROP POWER SM (1) 9X6	1.05	1.00	249
TOP17655	T.F. PROP POWER SM (1) 10X6	1.15	1.10	249
TOP17665	T.F. PROP POWER SM (1) 11X6	1.30	1.25	249
TOP17666	T.F. PROP POWER SM (1) 11X7	1.30	1.25	249
TOP17667	T.F. PROP POWER SM (1) 11X7.5	1.30	1.25	249
TOP17668	T.F. PROP POWER SM (1) 11X7.75	1.30	1.25	249
TOP17669	T.F. PROP POWER SM (1) 11X8	1.30	1.25	249
TOP17675	T.F. PROP POWER SM (1) 12X6	1.45	1.40	249
TOP17745	T.F. PROPS PWR SM (12) 9X6	12.60	10.10	249
TOP17755	T.F. PROPS PWR SM (12) 10X6	13.80	11.05	249
TOP17765	T.F. PROPS PWR SM (12) 11X6	15.60	12.50	249
TOP17766	T.F. PROPS PWR SM (12) 11X7	15.60	12.50	249
TOP17767	T.F. PROPS PWR SM (12) 11X7.5	15.60	12.50	249
TOP17768	T.F. PROPS PWR SM (12) 11X7.75	15.60	12.50	249
TOP17769	T.F. PROPS PWR SM (12) 11X8	15.60	12.50	249
TOP17775	T.F. PROPS PWR SM (12) 12X6	17.40	13.90	249
TOP45200	TOP FLITE SEALING IRON	18.95	14.75	204
TOP45301	TOP FLITE HEAT GUN	27.95	22.95	204
TOP45302	TOP FLITE IRON REPLACMENT SHOE	3.50	3.15	267
TOP72004	TOP FLITE RC-4 TAURI TRAINER	34.95	27.95	83
TOP72010	TOP FLITE RC-10 TOP DAWG	21.50	16.25	83
TOP72011	TOP FLITE RC-11 HEADMASTER	25.50	17.95	83
TOP73014	TOP FLITE RC-14 NOBLER	38.50	30.75	83
TOP73020	TOP FLITE RC-20 FRESHMAN TRNR.	44.95	38.70	81
TOP74007	TOP FLITE RC-7 TAURUS	53.95	40.50	83
TOP74012	TOP FLITE RC-12 KWIK-FLI III	59.95	44.95	83
TOP74013	TOP FLITE RC-13 SESA	59.95	44.95	83
TOP74015	TOP FLITE RC-15 CONTENDER	45.95	34.45	83
TOP74016	TOP FLITE RC-16 P-51B MUSTANG	57.95	43.50	82
TOP74017	TOP FLITE RC-17 P-40 WARHAWK	59.95	44.95	82
TOP74018	TOP FLITE RC-18 P-39 AIRACOBRA	59.95	44.95	82
TOP74019	TOP FLITE RC-19 P-47D THUNDELT	79.95	59.95	81
TOP77016	TOP FLITE CONVERSION KITP-51D	8.95	8.50	82
TOW15001	TOWER RC LONG PLUG -ONE ONLY-	1.20	1.05	217
TOW15006	TOWER RC LONG PLUG -SIX PLUGS-	7.20	4.80	217
TOW15012	TOWER RC LONG PLUG -ONE DOZEN-	14.40	8.40	217
TOW19000	TOWER 12 V STARTER BATTERY-WET	26.95	19.95	186
TOW19100	TOWER 12 V BATTERY CHARGER	13.95	9.95	186
TOW19200	TOWER 12 V GEL/CELL BATTERY	26.95	23.95	186
TOW20032	TOWER RUBBER BANDS 1/4LB #32	1.25	1.10	176
TOW20062	TOWER RUBBER BANDS 1/4LB #62	1.25	1.10	176
TOW20064	TOWER RUBBER BANDS 1/4LB #64	1.25	1.10	176
TOW27002	TOWER NYLON BOLTS 1/4X20X2 (2)	.80	.70	176
TOW27010	TOWER NYLON BOLTS 1/4X20X2(10)	1.75	1.65	176
TOW37001	TOWER PRECISION BLADE HANDLE#1	1.10	.75	201
TOW37011	TOWER PRECISION #11 BLADES (5)	.80	.55	201
TOW73040	TOWER M.A.N. TRAINER 40	49.95	39.95	86
TOW75040	TOWER WING KIT MAN TRAINER 40	23.95	18.95	86
TOW76040	TOWER FUSE KIT MAN TRAINER 40	29.95	24.25	86
TOW80142	TOWER SERVO ACCESSORY PKG-14II	1.98	1.75	130
TOW80152	TOWER SERVO ACEESSORY PKG-15II	1.98	1.75	130
TOW81140	TOWER KPS-14II SERVO (IVORY)	44.95	34.95	130
TOW81150	TOWER KPS-15II SERVO (IVORY)	44.95	34.95	130
TOW82314	TOWER SERVO TRAYS(3) PKG (14)	6.95	5.50	130
TOW82315	TOWER SERVO TRAYS(3) PKG (15)	6.95	5.50	130
TOW83000	TOWER 3 & 6 CH SWITCH HARNESS	7.95	6.95	130
TOW83010	TOWER AILERON EXTENSION WIRE	3.50	3.15	130
TOW83020	TOWER TX ANTENNA FOR 3 & 6 CH.	3.95	3.55	130
TOW83120	TOWER DUAL BATT. CHARGER-3 CH.	14.95	12.70	130
TOW83130	TOWER 6 CH TRANSFORMER-CHARGER	5.95	5.35	130
TOW83220	TOWER 550MA RX NICAD BATT-6 CH	17.95	15.25	130
TOW83240	TOWER 450MA RX NICAD BATT-3 CH	17.95	15.25	130
TOW83530	TOWER HOBBIES 3 CH RECEIVER	59.95	47.95	130
TOW83560	TOWER HOBBIES 6 CH RECEIVER	69.95	55.95	130
TOW83630	TOWER HOBBIES 3 CH TRANSMITTER	69.95	55.95	130
TOW83660	TOWER HOBBIES 6 CH TRANSMITTER	114.95	89.95	130
TOW88231	TOWER HOBBIES 3 CHANNEL RADIO	210.00	119.95	130
TOW88462	TOWER HOBBIES 6 CHANNEL RADIO	350.00	199.95	130
TOW90101	TOWER R/C BEGINNER'S BOOK	3.95	3.95	188
TOW90102	TOWER 'CRASHLESS WAY TO R/C'	4.95	4.95	186
TOW99100	TOWER DISPLAY PROP W/BOLTS	39.95	27.95	237
TOW99200	TOWER DISPLAY PROP W/CLOCK	54.95	39.95	237
TOW99300	TOWER RC PILOT NEEDLEPOINT KIT	24.95	16.95	237
TRX20001	TREXLER AIR PUMP	3.50	3.30	264
TRX21275	TREXLER WHEELS PAIR 2 3/4 IN	5.00	4.50	264
TRX21300	TREXLER WHEELS PAIR 3 IN.	6.00	5.40	264
TRX21350	TREXLER WHEELS PAIR 3 1/2 IN.	7.00	6.30	264
TRX21450	TREXLER WHEELS PAIR 4 1/2 IN.	8.00	7.20	264
VKK73003	VK CHEROKEE BABE	38.95	30.20	85
VKK73004	VK SUPER CORBEN	44.95	34.80	85
VKK74001	VK CHEROKEE	67.95	52.65	85
VKK74005	VK FOKKER TRIPLANE	67.95	52.65	84
VKK74006	VK NIEUPORT 17	67.95	52.65	84
VKK74007	VK SOPWITH CAMEL	67.95	52.65	84
WBR20170	WILLIAMS PILOT #170 MIL 1	.85	.80	238
WBR20171	WILLIAMS PILOT #171 MIL 1 1/2	1.20	1.15	238
WBR20172	WILLIAMS PILOT #172 MIL 2	1.40	1.35	238
WBR20174	WILLIAMS PILOT #174 STD 1	.85	.80	238
WBR20175	WILLIAMS PILOT #175 STD 1 1/2	1.20	1.15	238
WBR20176	WILLIAMS PILOT #176 STD 2	1.40	1.35	238
WBR20177	WILLIAMS PILOT #177 STD 2 5/8	1.95	1.85	238
WBR20178	WILLIAMS PILOT #178 RAC 1	.85	.80	238
WBR20179	WILLIAMS PILOT #179 RAC 1 1/2	1.20	1.15	238
WBR20180	WILLIAMS PILOT #180 RAC 2	1.40	1.35	238
WBR20181	WILLIAMS PILOT #181 RAC 2 5/8	1.95	1.85	238
WBR20182	WILLIAMS PILOT #182 SPT 1	.85	.80	238
WBR20183	WILLIAMS PILOT #183 SPT 1 1/2	1.20	1.15	238
WBR20184	WILLIAMS PILOT #184 SPT 2	1.40	1.35	238
WBR20185	WILLIAMS PILOT #185 SPT 2 5/8	1.95	1.85	238
WBR21124	VINTAGE WHEELS 124 3/4 IN	.70	.65	264
WBR21125	VINTAGE WHEELS 125 1 IN	.80	.75	264
WBR21126	VINTAGE WHEELS 126 1-1/4 IN	.80	.75	264
WBR21127	VINTAGE WHEELS 127 1-1/2 IN	1.20	1.15	264
WBR21128	VINTAGE WHEELS 128 1-7/8 IN	2.00	1.80	264
WBR21129	VINTAGE WHEELS 129 2-1/2 IN	3.25	2.95	264
WBR21130	VINTAGE WHEELS 130 3-1/8 IN	5.20	4.40	264
WBR21131	VINTAGE WHEELS 131 3-3/4 IN	6.85	5.80	264
WBR21132	VINTAGE WHEELS 132 4-3/8 IN	8.20	6.95	264
WBR21133	VINTAGE WHEELS 133 5 IN	9.85	8.35	264
WBR21136	SM CONTOUR WHEELS 136 3/4 IN	.70	.65	264
WBR21137	SM CONTOUR WHEELS 137 1 IN	.80	.75	264
WBR21138	SM CONTOUR WHEELS 138 1-1/4 IN	.95	.90	264
WBR21139	SM CONTOUR WHEELS 139 1-1/2 IN	1.20	1.15	264
WBR21146	GOLDEN AGE WHEELS 146 3/4 IN	.70	.65	264
WBR21147	GOLDEN AGE WHEELS 147 1 IN	.80	.75	264
WBR21148	GOLDEN AGE WHEELS 148 1-1/4 IN	.95	.90	264
WBR21149	GOLDEN AGE WHEELS 149 1-1/2 IN	1.20	1.15	264
WBR21150	GOLDEN AGE WHEELS 150 1-7/8 IN	2.00	1.90	264
WBR21151	GOLDEN AGE WHEELS 151 2-1/2 IN	3.25	2.95	264
WBR21152	GOLDEN AGE WHEELS 152 3-1/8 IN	5.20	4.40	264
WBR21153	GOLDEN AGE WHEELS 153 3-3/4 IN	6.85	5.80	264
WBR21154	GOLDEN AGE WHEELS 154 4-3/8 IN	8.20	6.95	264
WBR21155	GOLDEN AGE WHEELS 155 5 IN	9.85	8.35	264
WBR90160	MACHINE GUN 160 VICKERS	2.75	2.60	238
WBR90161	MACHINE GUN 161 LEWIS	2.20	2.10	238
WBR90162	MACHINE GUN 162 SPANDAU	2.75	2.60	238
WBR90163	MACHINE GUN 163 PARABELLUM	2.89	2.75	238
WEB01140	WEBRA #1022RC .40 RC BLACKHEAD	122.40	79.55	157
WEB01161	WEBRA #1020RC .61 RC BLACKHEAD	164.80	98.90	157
WEB05110	WEBRA #1008RC .10 RC FR SCHNRL	91.15	59.25	157
WEB05120	WEBRA #1019RC .20 RC FR SCHNRL	99.10	64.40	157
WEB05140	WEBRA #1034RC .40 RC FR SCHNRL	142.10	92.35	157
WEB05161	WEBRA #1024RC .61 RC FR SCHNRL	195.65	117.40	157
WEB05191	WEBRA #1037RC .91 RC FR SCHNRL	230.60	138.35	157

STOCK NO	DESCRIPTION	RETAIL PRICE	TOWER PRICE	PAGE #
WEB06161	WEBRA #1026RC .61 RC RV SCHNRL	221.90	133.15	157
WEB09000	WEBRA TUNED PIPE #1100/7 61WR	56.85	39.80	225
WEB09040	WEBRA #1035RCW .40 RC MARINE	169.75	101.85	157
WEB09061	WEBRA #1026WR 61 RV SCH MARINE	245.00	146.95	157
WEB09091	WEBRA #1039RCW .91 SCHL MARINE	269.45	161.65	157
WEB13091	WEBRA MUFFLER FOR .91	61.55	42.95	225
WEB13739	WEBRA 1024 EXP MUFF #1100/6EG	14.95	12.50	225
WEB13759	WEBRA 1024 FT MUFF #1100/6ER	25.00	20.75	225
WIN20211	WING CONTROL RODS #211	3.39	3.25	176
WIN20212	WING CONTROL ROD END CAP #211A	1.15	1.10	176
WIN20229	WING NI-CHROME WIRE #229 25 FT	4.95	4.50	201
WIN20602	WING LOW PROFILE CANOPY #602	4.95	4.50	238
WIN20604	WING STREAMLINED CANOPY #604	4.95	4.50	238
WIN20812	WING MAGIC MOLDER MACHINE	99.95	56.95	201
WIN20904	WING .04 STYRENE 8X12 SHEETS-6	3.00	2.85	201
WIN21212	WING INSTALLATION KIT #212	3.78	3.60	265
WIN72001	WING DRONE AIRPLANE KIT	49.95	35.95	86
WIN73402	WING THE LOVE MACHINE	49.95	35.95	86
WIN75001	WING FOAM WING DRONE	10.95	9.75	86
WIN75002	WING FOAM WING LOVE MACHINE	10.95	9.75	86
WIN75101	WING FOAM WING RCM TRAINER 60	15.95	14.25	265
WIN75102	WING FOAM WING BASIC TRAINER	10.95	9.75	265
WIN75103	WING FOAM WING QUICKIE 500	10.95	9.75	265
WIN75104	WING FOAM WING MAN TRAINER 40	10.95	9.75	265
WIN75105	WING FOAM WING RCM TRAINER 40	10.95	9.75	265
WIN75201	WING FOAM WING LITTLE STICK	10.95	9.75	265
WIN75202	WING FOAM WING UGLY STICK	15.95	14.25	265
WIN75203	WING FOAM WING SWEET STICK	10.95	9.75	265
WIN75205	WING FOAM WING FLEDGLING	10.95	9.75	265
WIN75206	WING FOAM WING SR. FALCON	15.95	14.25	265
WIN75207	WING FOAM WING FALCON 56	10.95	8.75	265
WIN75208	WING FOAM WING SKYLARK	10.95	9.75	265
WIN75209	WING FOAM WING A-RAY	10.95	9.75	265
WIN75210	WING FOAM WING H-RAY	10.95	9.75	265
WIN75211	WING FOAM WING SUPER KAOS 40	10.95	9.75	265
WIN75212	WING FOAM WING SKYLANE 62	16.95	14.95	265
WIN75215	WING FOAM WING CONTENDER	15.95	14.25	265
WIN75216	WING FOAM WING GAZARIATOR	15.95	14.25	265
WIN75217	WING FOAM WING HEADMASTER	10.95	9.75	265
WIN75218	WING FOAM WING TRAINERMASTER	10.95	9.75	265
WIN75219	WING FOAM WING SIG KADET	10.95	9.75	265
WIN75220	WING FOAM WING BOX FLY	10.95	9.75	265
WIN75221	WING FOAM WING JR BOX FLY	10.95	9.75	265
WIN75223	WING FOAM WING MEN TRAINER	13.95	12.50	265
WIN75224	WING FOAM WING BRIDI SUN FLI	10.95	9.75	265
WIN75301	WING FOAM WING KAOS	15.95	14.25	265
WIN75303	WING FOAM WING MACH-1	15.95	14.25	265
WIN75304	WING FOAM WING KWIK FLY-TAPERD	15.95	14.25	265
WIN75305	WING FOAM WING SUPER KAOS 60	15.95	14.25	265
WIN75306	WING FOAM WING STRIKEMASTER	15.95	14.25	265
WIN75307	WING FOAM WING SPORTMASTER	15.95	14.25	265
WIN75309	WING FOAM WING PHOENIX-6	15.95	14.25	265
WIN75310	WING FOAM WING SIG KOMET	15.95	14.25	265
WIN75311	WING FOAM WING DIRTY BIRDY	15.95	14.25	265
WIN75501	WING FOAM WING T. F. P-40	15.95	14.25	265
WIN75502	WING FOAM WING T. F. P-39	15.95	14.25	265
WIN75503	WING FOAM WING T-F P-51	16.95	14.95	265
WIN75504	WING FOAM WING PLATT T-28 B	18.95	16.75	265
WIN75505	WING FOAM WING PLATT FW-190	18.95	16.75	265
WIN75701	WING FOAM WING AEROMASTER	18.95	16.75	265
WLH31008	WILHOLD ALIPHATIC RESIN 8 OZ.	1.75	1.65	182
WLH31017	WILHOLD ALIPHATIC RESIN 17 OZ.	2.89	2.75	182
WLH31054	WILHOLD SPRAY ADHESIVE 12 OZ.	3.20	3.05	182
WLH31056	WILHOLD R/C-56 ADHESIVE 4 OZ.	1.20	1.15	182
WOR72009	WORLD J-3 CUB	39.95	33.95	87
WOR72010	WORLD AERONCA CHAMP	39.95	33.95	87
WOR73100	WORLD MR. MULLIGAN	47.95	40.95	87
WOR81710	WORLD S-10 SERVO	45.00	38.25	141
WOR81711	WORLD S-11 SERVO	45.00	38.25	141
WOR82710	WORLD SERVO TRAY S-10 (FITS 3)	3.50	3.30	141
WOR82711	WORLD SERVO TRAY S-11 (FITS 3)	3.50	3.30	141
WOR84711	WORLD S-11 RETRACT SERVO	52.50	44.75	141
WOR88851	WORLD EXPERT MKII 1-5 W/4 SERV	419.95	249.95	141
WOR88852	WORLD EXPERT MKII 2-5 W/4 SERV	399.95	245.95	141
WOR88871	WORLD EXPERT MKII 1-7 W/4 SERV	459.95	272.95	141
WOR88872	WORLD EXPERT MKII 2-7 W/4 SERV	439.95	262.95	141
WOR88972	WORLD EXPERT MKII 2-7 W/5 SERV	464.95	271.95	141
WOR88975	WORLD EXPERT MKII 1-7 W/5 SERV	484.95	289.95	141
WST74000	WESCRAFT B-17 FLYING FORTRESS	495.00	399.95	87
XAC36051	X-ACTO 5011 KNIFE SET	1.69	1.50	203
XAC36053	X-ACTO 7530 RAZOR SAW SET	3.79	3.40	203
XAC36062	X-ACTO 5062 DOUBLE KNIFE SET	3.99	3.60	203
XAC36070	X-ACTO 7070 SCREWDRIVER SET	3.29	2.95	203
XAC36082	X-ACTO 5082 KNIFE CHEST	6.99	6.30	203
XAC36083	X-ACTO 5083 DELUXE KNIFE CHEST	7.99	7.20	203
XAC36084	X-ACTO 5284 KNIFE & TOOL SET	17.95	15.95	203
XAC36085	X-ACTO 5085 DLX KN. & TOOL SET	26.95	21.55	203
XAC36086	X-ACTO 5086 KNIFE & TOOL CHEST	19.95	17.95	203
XAC36087	X-ACTO 5087 KNIFE & TOOL CHEST	29.95	26.95	203
XAC36088	X-ACTO 5088 COMPLETE K&T CABNT	54.50	40.85	203
XAC36089	X-ACTO 5089 DLX K&T CABINET	64.50	48.35	203
XAC36099	X-ACTO 5099 SUPER TOOL CABINET	89.50	66.95	203
XAC36351	X-ACTO 7351 CONTOURED SANDERS	5.59	5.00	203
XAC36531	X-ACTO 7531 KAZOR SAW & KNIFE	6.99	6.30	203
XAC36532	X-ACTO 7532 MITRE BOX SET	5.99	5.40	203
XAC36533	X-ACTO 7533 MITRE BOX-ONLY	2.99	2.70	203
XAC37001	X-ACTO 3001 KNIFE #1	.99	.95	203
XAC37002	X-ACTO 3002 KNIFE #2	1.50	1.35	203
XAC37006	X-ACTO 3006 KNIFE #6	2.59	2.35	203
XAC37008	X-ACTO 8 BLADE(5)	.79	.75	203
XAC37009	X-ACTO 3209 RETRAC. KNIFE #9RX	3.99	3.60	203
XAC37010	X-ACTO 10 BLADE(5)	1.10	1.00	203
XAC37011	X-ACTO 11 BLADE(5)	.69	.65	203
XAC37015	X-ACTO 215 BLADE(3)	1.19	1.10	203
XAC37022	X-ACTO 22 BLADE(5)	1.19	1.10	203
XAC37024	X-ACTO 24 BLADE(5)	.69	.65	203
XAC37026	X-ACTO 226 BLADE(3)	.89	.85	203
XAC37034	X-ACTO 234 SAW BLADE 3/4 DEEP	1.29	1.15	203
XAC37035	X-ACTO 235 SAW BLADE 1 IN DEEP	1.29	1.15	203
XAC37040	X-ACTO 7040 BLOCK PLANER	2.29	2.05	203
XAC37041	X-ACTO 7041 1 IN. SANDER	1.19	1.10	203
XAC37042	X-ACTO 7042 2 IN. SANDER	1.29	1.15	203
XAC37044	X-ACTO 7044 COPING SAW	3.99	3.60	203
XAC37045	X-ACTO 7045 SPOKESHAVE	1.59	1.45	203
XAC37046	X-ACTO 7446 'C' CLAMP SET	5.99	5.40	203
XAC37047	X-ACTO 7047 HAND DRILL	5.99	5.40	203
XAC37048	X-ACTO 7048 BALSA STRIPPER	2.49	2.25	203
XAC37050	X-ACTO 7050 HAMMER SET	5.99	5.40	203
XAC37108	X-ACTO 3208 RETR'BLE KNIFE #8R	.69	.65	203
XAC37135	X-ACTO 236 SAW BLADE 1-1/4 IN.	1.69	1.50	203
XAC37139	X-ACTO 239 SAW BLADE, X-FINE	1.79	1.60	203
XAC37144	X-ACTO 735 SPIRAL SAW BLADE(3)	.99	.95	203
XAC37145	X-ACTO 734 COPING SAW BLADE(5)	1.59	1.45	203
XAC37361	X-ACTO 7361 NEEDLE FILE SET	7.59	6.85	203
XAC37370	X-ACTO 7370 MINI VACU-VISE	4.79	4.30	203
XAC37376	X-ACTO 7376 CORDLESS DRILL SET	8.99	8.10	203
XAC37378	X-ACTO 7378 SOLDERING IRON W/K	8.49	7.65	203
XAC37380	X-ACTO 7380 PART PICKER	2.29	2.05	203
XAC37504	X-ACTO 7504 PLIERS-SIDE CUT	4.99	4.50	203
XAC37505	X-ACTO 7505 PLIERS-DIAG CUT	4.99	4.50	203
XAC37509	X-ACTO 7509 PLIERS-LONG NOSE	4.99	4.50	203
XAC37655	X-ACTO 7535 KAZOR SAW SET	3.29	2.95	203
XAC37659	X-ACTO 7059 BENCH VISE	3.79	3.40	203
XAC37663	X-ACTO 7163 HVY DUTY FILE SET	8.59	7.75	203
ZIN17131	ZINGER PROP 1 ONLY 7X4	1.20	1.15	249
ZIN17132	ZINGER PROP 1 ONLY 7X5	1.20	1.15	249
ZIN17133	ZINGER PROP 1 ONLY 7X6	1.20	1.15	249
ZIN17141	ZINGER PROP 1 ONLY 8X4	1.30	1.25	249
ZIN17142	ZINGER PROP 1 ONLY 8X5	1.30	1.25	249
ZIN17143	ZINGER PROP 1 ONLY 8X6	1.30	1.25	249
ZIN17151	ZINGER PROP 1 ONLY 9X4	1.30	1.25	249
ZIN17152	ZINGER PROP 1 ONLY 9X5	1.30	1.25	249
ZIN17153	ZINGER PROP 1 ONLY 9X6	1.30	1.25	249
ZIN17155	ZINGER PROP 1 ONLY 9X7	1.30	1.25	249
ZIN17161	ZINGER PROP 1 ONLY 10X4	1.40	1.35	249
ZIN17162	ZINGER PROP 1 ONLY 10X5	1.40	1.35	249
ZIN17163	ZINGER PROP 1 ONLY 10X6	1.40	1.35	249
ZIN17165	ZINGER PROP 1 ONLY 10X7	1.40	1.35	249
ZIN17173	ZINGER PROP 1 ONLY 11X6	1.60	1.55	249
ZIN17174	ZINGER PROP 1 ONLY 11X6W	1.60	1.55	249
ZIN17175	ZINGER PROP 1 ONLY 11X7	1.60	1.55	249
ZIN17176	ZINGER PROP 1 ONLY 11X7W	1.60	1.55	249
ZIN17177	ZINGER PROP 1 ONLY 11X7.5	1.60	1.55	249
ZIN17178	ZINGER PROP 1 ONLY 11X8	1.60	1.55	249
ZIN17631	ZINGER PROPS- 6 EACH - 7X4	7.20	6.15	249
ZIN17632	ZINGER PROPS- 6 EACH - 7X5	7.20	6.15	249
ZIN17633	ZINGER PROPS- 6 EACH - 7X6	7.20	6.15	249
ZIN17641	ZINGER PROPS- 6 EACH - 8X4	7.80	6.65	249
ZIN17642	ZINGER PROPS- 6 EACH - 8X5	7.80	6.65	249
ZIN17643	ZINGER PROPS- 6 EACH - 8X6	7.80	6.65	249
ZIN17651	ZINGER PROPS- 6 EACH - 9X4	7.80	6.65	249
ZIN17652	ZINGER PROPS- 6 EACH - 9X5	7.80	6.65	249
ZIN17653	ZINGER PROPS- 6 EACH - 9X6	7.80	6.65	249
ZIN17655	ZINGER PROPS- 6 EACH - 9X7	7.80	6.65	249
ZIN17661	ZINGER PROPS- 6 EACH - 10X4	8.40	7.15	249
ZIN17662	ZINGER PROPS- 6 EACH - 10X5	8.40	7.15	249
ZIN17663	ZINGER PROPS- 6 EACH - 10X6	8.40	7.15	249
ZIN17665	ZINGER PROPS- 6 EACH - 10X7	8.40	7.15	249
ZIN17673	ZINGER PROPS- 6 EACH - 11X6	9.60	8.15	249
ZIN17674	ZINGER PROPS- 6 EACH - 11X6W	9.60	8.15	249
ZIN17675	ZINGER PROPS- 6 EACH - 11X7	9.60	8.15	249
ZIN17676	ZINGER PROPS- 6 EACH - 11X7W	9.60	8.15	249
ZIN17677	ZINGER PROPS- 6 EACH - 11X7.5	9.60	8.15	249
ZIN17678	ZINGER PROPS- 6 EACH - 11X8	9.60	8.15	249

HOW TO ORDER INSTRUCTIONS

(ORDER FORMS ARE ON PAGES 285 and 287)

1) Please print clearly or type your name and address along with today's date, your customer number (if you have one), and your phone area code and number.

2) Please indicate by "yes" or "no" whether this is your first order with Tower Hobbies by answering the question at the bottom of the order form directly to the left of the subtotal line.

3) If this it NOT your first order but your address has changed since your last order, please make note of this in the empty space at the bottom of the form.

4) List the items you want by indicating quantity ordered, Tower Stock Number, merchandise description, price each, and total amount (i.e., quantity desired times price each) for each item ordered. Please double-check your stock numbers.

5) In the B,S,R column, please write either B,S, or R for each item ordered. This is absolutely necessary in the event TOWER HOBBIES should be out ot stock of the item ordered. These symbols are your instructions to Tower, and they stand for:
B = Backorder this item if out of stock and notify immediately how long the delay will be. Small items not backorderable will be treated as R's.
S = Substitute a product of similar price and quality.
R = Do not backorder this item.
Please note: We will credit your account for out of stock items that are not backordered, unless you specifically request a Tower refund check for all out of stock items.

6) Illinois residents add 5% sales tax to the sub-total. Out of state customers do not have to pay any sales tax at all.

7) Add $2.00 for postage, handling, and insurance. If some item(s) of your order are backordered, they will be shipped postage pre-paid when they become available. You will not incur any further postage costs.

8) If you are sending payment with your order, please include a money order, cashiers check or a personal check for the Grand Total amount. **PLEASE DO NOT SEND CASH.** Personal checks may be held for clearance before shipping. (See Page 7) When this is the case, you will be notified immediately that your order is being held up.

9) COD ORDERS - If you want your order sent COD then simply write in $2.00 in the space above Grand Total and then total up your order. You will be required to pay for your order at the time of delivery.

10) PHONE ORDERS - If you prefer, you can phone your order in by using our TOLL FREE number. If you do, please have the above information ready to give our sales people.

CALL TOWER TOLL FREE

ILLINOIS RESIDENTS CALL

800-637-7686 800-252-3336

FOR YOUR CONVENIENCE OUR TOLL FREE LINES ARE OPEN FROM 9:00 AM TO 5:00 PM WEEKDAYS, 6:00 PM TO 9:00 PM ON MONDAY THROUGH THURSDAY EVENINGS, AND 10:00 AM TO 5:00 PM ON SATURDAYS. CLOSED FRIDAY EVENINGS AND SUNDAYS.

NOTE: TOLL FREE WATS LINES cover the 48 Continental states only. From Alaska, Hawaii, U.S. possessions, and all Foreign Countries call 217-384-1010. This is not a toll free number.

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NAME _____ DATE _____

ADDRESS _____ CUSTOMER NUMBER _____

CITY _____ STATE _____ ZIP CODE _____ PHONE NUMBER _____

QUANTITY ORDERED	TOWER STOCK NUMBER	MERCHANDISE DESCRIPTION	B,S,R	PRICE EACH	TOTAL AMOUNT

PLEASE DO NOT WRITE IN THE SPACES BELOW

IS THIS YOUR FIRST ORDER WITH TOWER HOBBIES? _____

Complete Ordering Instructions Are On Page 284

* * THANK YOU FOR YOUR ORDER * *

SUB-TOTAL	
ILL. RESIDENTS. ADD 5% TAX	
POSTAGE, INS., HAND	**$2.00**
COD'S, ADD $2.00	
GRAND TOTAL	



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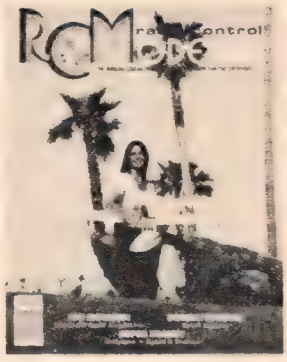
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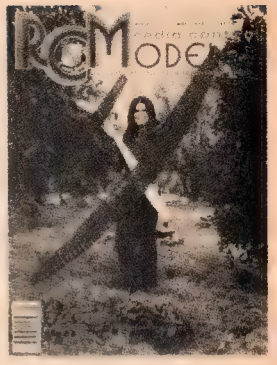
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NAME _____ DATE _____

ADDRESS _____ CUSTOMER NUMBER _____

CITY _____ STATE _____ ZIP CODE _____ PHONE NUMBER _____

QUANTITY ORDERED	TOWER STOCK NUMBER	MERCHANDISE DESCRIPTION	B,S,R	PRICE EACH	TOTAL AMOUNT

PLEASE DO NOT WRITE IN THE SPACES BELOW

IS THIS YOUR FIRST ORDER WITH TOWER HOBBIES? _____

Complete Ordering Instructions Are On Page 284

* * THANK YOU FOR YOUR ORDER * *

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ILL. RESIDENTS. ADD 5% TAX	
POSTAGE. INS.. HAND	**$2.00**
COD'S, ADD $2.00	
GRAND TOTAL	



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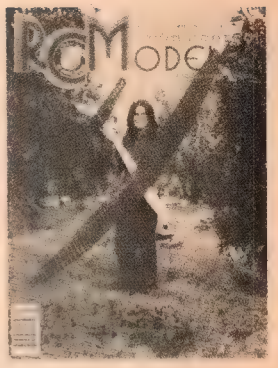
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Southgate, CA 90280
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Clifton House
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703-830-1000

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Bryan, OH 43506
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212-392-3333

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23018 Normandie Ave.
Torrance, CA 90502
213-539-2313

TOWER HOBBIES ACTION POST CARDS

If you need more information directly from the manufacturer about a product that's listed in this catalog or about a product that has just been released and therefore is not in this catalog then simply detach one of these handy postcards below. Get the manufacturers address from the list on pages 289 and 290 and write it in on the "TO" lines. Please print or type your name and return address on the "FROM" lines so the manufacturer will know who to send the reply to. Fill out the back side with the date and check the appropriate box(es) as well as filling out the blank(s). Sign and mail the card being sure to put a stamp on it. **DO NOT SEND THE CARD TO TOWER HOBBIES** — send direct to the manufacturer. This convenient service is just another exclusive of Tower Hobbies. After all, don't you expect the little extras from the # 1 mail order company?

FROM: _____

_____

_____

Place Postcard Rate 1st Class Postage Here

TO: _____
(manufacturer's name)

_____
(manufacturer's street address or box number)

_____ _____ _____
(city) (state) (zip code)

TOWER HOBBIES ACTION POST CARD

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TO: _____
(manufacturer's name)

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(manufacturer's street address or box number)

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(manufacturer's name)

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(manufacturer's street address or box number)

_____ _____ _____
(city) (state) (zip code)

TOWER HOBBIES ACTION POST CARD

FROM: _____

_____

_____

Place Postcard Rate 1st Class Postage Here

TO: _____
(manufacturer's name)

_____
(manufacturer's street address or box number)

_____ _____ _____
(city) (state) (zip code)

TOWER HOBBIES ACTION POST CARD

DEAR MR. MANUFACTURER: DATE_____

I AM INTERESTED IN PURCHASING ONE OF YOUR PRODUCTS, BUT I NEED MORE INFORMATION THAN WHAT WAS PRESENTED IN THE 1978 TOWER HOBBIES CATALOG. PLEASE DO THE FOLLOWING ITEM(S) CHECKED:

☐ Send brochures, catalogs, etc. about your _____

_____ shown on page _____ of the Tower Catalog.

☐ Send information about _____

☐ Please answer this question for me: _____

_____

_____

Thank you for your immediate attention to my request!

Signed_____
(name & address printed on other side for reply)

DEAR MR. MANUFACTURER: DATE_____

I AM INTERESTED IN PURCHASING ONE OF YOUR PRODUCTS, BUT I NEED MORE INFORMATION THAN WHAT WAS PRESENTED IN THE 1978 TOWER HOBBIES CATALOG. PLEASE DO THE FOLLOWING ITEM(S) CHECKED:

☐ Send brochures, catalogs, etc. about your _____

_____ shown on page _____ of the Tower Catalog.

☐ Send information about _____

☐ Please answer this question for me: _____

_____

_____

Thank you for your immediate attention to my request!

Signed_____
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TOWER IS TOPS!

WHO IS TOWER HOBBIES ? Tower Hobbies is the largest, finest, fastest, friendliest, and the most progressive Radio Control Mail Order Company in the United States. Tower Hobbies is **not** a little hobby shop that sells mail order as a sideline, but rather we are a highly specialized and efficient volume merchandiser. Tower's quantity purchasing and efficient order processing add up to fantastic savings and excellent service for our more than 35,000 active customers. Very simply, Tower Hobbies is the only R/C supply company you'll ever need !

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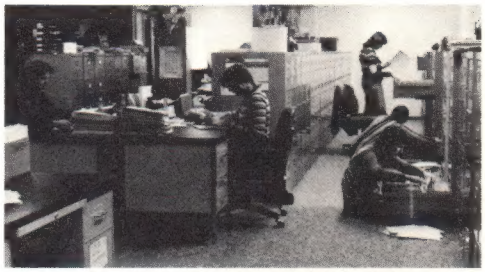
DISCOUNT PRICES - Tower Hobbies is the most competitive company in the hobby. Your hobby supplies cost you less from Tower because our volume purchasing and sales allow us to work closer than anyone else in the business. We would rather sell 10 radios at $10.00 profit each than to sell one radio at $100.00 profit - and that means super savings for you! Tower sells only brand new, brand name merchandise and we sell it at super discounts. Can you think of any reason why you should pay more for exactly the same product elsewhere?

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TOLL FREE PHONES - Tower Hobbies was the first to offer Toll Free " 800 " phone service to its customers. With the Toll Free lines you can call Tower at no charge to yourself to place orders, check on availabilities, check current prices, obtain professional advice, or whatever. Your telephone is a straight connection to the largest and finest R/C inventory in the United States - it's fast, easy, and free of charge.

COMPUTER POWER - Tower was the first and as far as we know still the only mail order company in the hobby to keep track of inventory, remember backorders, and process all orders with a computer. This enables us to keep errors to an absolute minimum which means that you don't have the headache of receiving wrong merchandise, being billed incorrectly, or having your backorders forgotten or misplaced. Tower processes your order quickly and correctly this time, next time, and everytime!

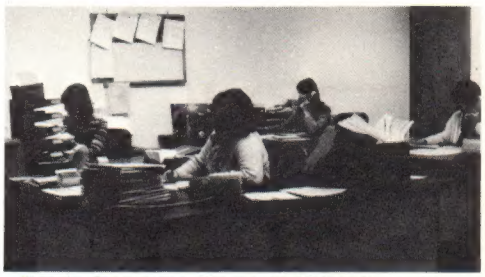
EXTENSIVE INVENTORY - Tower Hobbies has the largest and most complete inventory of radio controlled model airplane supplies and related accessories in the United States. Tower carries over 150 manufacturers lines including: Airborne, Ace, A.F.I., Airtronics, A.H.M., A-Justo-Jig, Allied Hobbies, Ambroid, Andrews, American Helicopters, Austin Craft, Badger, Banner, Bauer, Bolectra, Bridi, B.W.T., C.B. Associates, Custom Model Prod., Concept, Coverite, Cox, Craft Air, D&B, DAE, Devcon, Dodgson, Dremel, DuBro, Dumas, Economy Plus, Edson, Enya, Eveready, Exhib'air, Fliteglas, Fox, Fuseite, Futaba, Gas Model Prod., Goldberg, G.M.C.. Graupner, Grish, Hallco, Hobbypoxy, Hot Stuff, House of Balsa, Jemco, Jensen, K&B, Kavan, Kraft, Kwik-Cote, Lanier, Legionair, Leisure, Lenco, Long Island, Maco, Mark's Models, M.E.N., Microflame, Mich. Hobby, Mile High Models, Midwest, Milman, Miller, Model Dynamics, Monokote, M.R.C., Neal's, Bud Nosen, Octura, O.S. Max, Pactra Aerogloss, Panavise, Pacer, Perry, Platt, Powr-mite, Prather, Proctor, Power Pacer, R&S, R/C Guide, Rocket City, Rev-up, Robart, Rhom, Royal, 60 to Go, Sanwa, Scozzi, Sealector, Semco, Sherline, Sig, Simmons, Skyglas, Slimline, Bob Smith, Solarfilm, Soarcraft, Sonic Systems, Southwestern, Spickler, Su-Pr-Line, Southern R/C, Sta-Brite, Stafford, Sterling, Supertigre, SonicTronics, Sullivan, Superpoxy, SureFlite, Tatone, Titebond, Tomco, Top Flite, Tower, Trexler, Universal, V.K., Williams Bros., Webra, Wing Mfg., Wilhold, World Engines, Westcraft, X-Acto, Zinger, Zap and more!



The front office file area is a busy place! Over 35,000 active customer files fill up 70 file cabinets. Can we make a file for you?



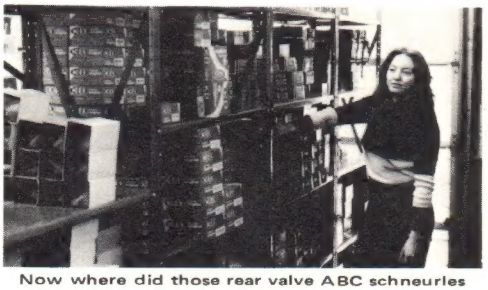
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WHEN YOU CALL TOWER HOBBIES ON OUR SPECIAL 800 WATS NUMBERS, IT'S ABSOLUTELY FREE OF ANY CHARGE TO YOU. IT'S JUST ONE MORE WAY THAT

TOWER HOBBIES SERVES YOU!

FOR YOUR CONVENIENCE OUR TOLL FREE LINES ARE OPEN FROM 9:00 AM TO 5:00 PM WEEKDAYS, 6:00 PM TO 9:00 PM ON MONDAY THROUGH THURSDAY EVENINGS, AND 10:00 AM TO 5:00 PM ON SATURDAYS. CLOSED FRIDAY EVENINGS AND SUNDAYS.

WE'RE AS CLOSE AS YOUR PHONE - JUST GIVE US A CALL . . .

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. . . . FOR ASSISTANCE IN DECIDING BETWEEN PRODUCTS
. . . . FOR FAST AND ACCURATE ANSWERS TO YOUR QUESTIONS
. . . . FOR HELP IN STRAIGHTENING OUT A POSSIBLE PROBLEM
. . . . FOR INFORMATION REGARDING CURRENT AVAILABILITIES